federal register

Friday
June 19, 1992

Part II

Department of Transportation

Coast Guard

33 CFR Part 155
Vessel Response Plans; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 155

[CGD 91-034]

RIN 2115-AD61

Vessel Response Plans

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to establish regulations requiring response plans for certain vessels that carry oil in bulk as cargo, and additional requirements for such vessels operating in Prince William Sound, Alaska. These regulations are mandated by the Federal Water Pollution Control Act (FWPCA), as amended by the Oil Pollution Act of 1990. The purpose of these requirements is to improve response capabilities and minimize the impact of oil spills from these vessels.

DATES: Comments must be received on or before August 3, 1992.

ADDRESSES: Comments must be in writing and may be mailed to the Executive Secretary, Marine Safety Council (G-LRA-2/3406), (CGD 91-034), U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001, or may be delivered to room 3406 at the above address between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

Comments on collection of information requirements must also be mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, ATTN: Desk Officer, U.S. Coast Guard.

The Executive Secretary maintains the public docket for this rulemaking. Comments will become part of this docket and will be available for inspection or copying at U.S. Coast Guard Headquarters, room 3406. For information concerning comments, the telephone number is (202) 267-1477.

FOR FURTHER INFORMATION CONTACT: Lieutenant Commander Glenn Wiltshire, Project Manager, Oil Pollution Act (OPA 90) Staff, (G-MS-1), (202) 267-6739. This telephone is equipped to record messages on a 24-hour basis.

SUPPLEMENTARY INFORMATION:

Request for Comments

The Coast Guard encourages interested persons to participate in this rulemaking by submitting written views, data, or arguments. Persons submitting comments should include their name and address, identify this rulemaking (CGD 91-034) and the specific section of the proposal to which each comment applies, and give the basis for each comment. Persons wanting acknowledgment of receipt of comments should enclose a stamped, self-addressed postcard or envelope. The Coast Guard will consider all comments received during the comment period.

The Coast Guard plans no public hearing at this time. Persons may request a public hearing by writing to the Marine Safety Council at the address under **"ADDRESSES."** Requests should indicate why a public hearing is considered necessary. If the Coast Guard determines that the opportunity for oral presentations will aid this rulemaking, it will hold a public hearing at a time and place announced by a later notice in the **Federal Register.**

Drafting Information

The principal persons involved in drafting this document are Lieutenant Commander Glenn Wiltshire, Project Manager, LCDR Robert Diaz, Project Manager (for Prince William Sound Section only), and Mary-Jo Cooney Spottswood, Project Counsel, Oil Pollution Act of 1990 (OPA 90) Staff (G-MS-1).

Background and Purpose

In recent years, several catastrophic oil spills have threatened the marine environment along the coastal areas of the United States. Among these spills were the EXXON VALDEZ in Prince William Sound, the AMERICAN TRADER in California's coastal waters, and the MEGA BORG in the Gulf of Mexico. These spills have resulted in extensive damage to the marine environment, including the loss of fish and wildlife. In response to these disasters and others, Congress passed the Oil Pollution Act of 1990 (OPA 90) (Pub. L. 101-380).

OPA 90 requires owners and operators of certain vessels to submit individual response plans for approval. This notice of proposed rulemaking (NPRM) presents proposed rules to implement the OPA 90 requirements for vessel response plans, including additional requirements for certain vessels operating in Prince William Sound. This NPRM addresses sections 4202(a)(6), sections 4202(b)(4), and section 5005 of OPA 90. Section 4202(a)(6) of OPA 90 amended section 311(j) of the Federal Water Pollution Control Act (FWPCA) (33 U.S.C. 1321) and set out the requirements for vessel response plans in section 311(j)(5). Section 4202(b)(4) of OPA 90 set the implementation schedule for these provisions. Section 5005 of OPA 90 set oil spill removal requirements for Prince William Sound in addition to those imposed by section 4202(a)(6). These requirements include prepositioning oil spill containment equipment and establishing private oil spill removal organizations to protect property and economic interests, especially fish hatcheries.

This notice does not address the requirements of section 4202(a)(6) of OPA 90 for the carriage and inspection of discharge-removal equipment. These requirements will be the subject of a separate rulemaking.

OPA 90 requires response plans for "oil or hazardous substance" spills. Section 4202(b)(4)(B) establishes an implementation schedule for submission and approval of oil spill response plans only; response plans for hazardous substance spills will be the subject of a separate rulemaking.

Regulations for facility response plans are being developed in concert with other Federal agencies, including the Environmental Protection Agency (EPA), the Minerals Management Service (MMS), and the Department of Transportation (DOT) Research and Special Programs Administration (RSPA). These will also be the subject of a separate rulemaking.

Vessel Response Plans

As amended, section 311(j)(5) of the FWPCA, requires owners and operators of all vessels that are constructed or adapted to carry, or that carry oil or hazardous substances in bulk as cargo or cargo residue prepare and submit individual response plans to the President for approval. This authority was delegated to the Secretary of Transportation by Executive Order 12777 (56 FR 54757) and subsequently to the Commandant of the Coast Guard in 46 CFR 1.46(m) (57 FR 8581).

These proposed rules would be applicable to all vessels certificated under 46 CFR subchapter D, all other certificated vessels that are permitted to carry limited quantities of oil as defined in section 311(a)(1) of the FWPCA and any other uninspected vessel that carries oil in bulk as cargo or cargo residue. As used in these proposed rules, oil includes but is not limited to petroleum, fuel oil, sludge, oil refuse, and oil mixed with waste other than dredge spoils. This includes animal and vegetable oils in addition to petroleum oil. Thus, vessels that carry these oils as secondary cargoes require response plans.

Section 311(j)(5)(C) of the FWPCA requires that response plans must: (1) Be consistent with the National Oil and

Hazardous Substances Pollution Contingency Plan (NCP) and any Area Contingency Plan (ACP) for the geographic area in which the vessel operates; (2) identify the qualified individual with full authority to implement response actions, including liaison with the Federal On-Scene Coordinator (OSC) and response contractors; (3) identify and ensure the availability of, by contract or other approved means, private personnel and equipment necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from the vessel; (4) describe the training, equipment testing, periodic unannounced drills, and response actions that will be carried out under the response plan to ensure the safety of the vessel and mitigate the effects of an oil discharge; and (5) include procedures for periodically updating or resubmitting the response plan for approval when significant changes occur. Worst case discharge is defined in section 311(a) of the FWPCA as a discharge in adverse weather conditions of a vessel's entire cargo.

A major objective of the OPA 90 amendments to section 311(j)(5) of the FWPCA is to create a system in which private parties supply the bulk of equipment and personnel needed for an oil spill response in a given area. For example, response plans must identify and ensure the availability of private personnel and equipment necessary to remove, to the maximum extent practicable, a worst case discharge, including a discharge resulting from fire or explosion aboard the vessel. Such a discharge will likely require the use of both private and public resources. However, the vessel response plan is required to only identify private resources. The integration and coordination of public and private response resources will be addressed in the applicable Area Contingency Plans.

Section 311(j)(5)(D) of the FWPCA requires the Coast Guard to review vessel response plans; require amendments to any plan that does not meet the requirements set forth under the provisions of section 311(j)(5)(C) of the FWPCA; and approve any plan that does comply with those provisions.

After February 18, 1993, a vessel required to have a response plan may not handle, store, or transport oil unless a plan has been submitted for approval. After August 18, 1993, a vessel requiring a response plan may not perform any of these functions unless it is operating in compliance with that plan. After submission of a plan, but prior to its approval, a vessel may continue operations for up to 2 years if the owner or operator of the vessel has certified the availability of private personnel and equipment sufficient to respond to a worst case discharge.

Section 5005 of OPA 90 establishes requirements for vessel response plans above and beyond the requirements of section 311(j) of the FWPCA. Through the requirements of section 5005 of OPA 90, an owner or operator of a vessel that carriers oil in bulk as cargo that operates on Prince William Sound, Alaska, is required to submit a response plan that provides an additional level of preparedness over and above those identified in section 311(j)(5) of the FWPCA. The response plan requirements of section 311(j)(5) of the FWPCA are intended to ensure an effective and immediate response to an oil spill nationwide. The additional requirements of section 5005 of OPA 90 are intended to provide a even greater margin of safety in Prince William Sound by: providing for response equipment to be prepositioned; establishing an oil spill removal organization; requiring special training for residents in Prince William Sound; performing periodic inspection, testing and certification of response equipment; and exercising of the required trained personnel and spill removal equipment.

Advance Notice of Proposed Rulemaking

The Coast Guard published an Advance Notice of Proposed Rulemaking (ANPRM) on this project in the August 30, 1991 **Federal Register** (56 FR 43534). The ANPRM discussed the background, statutory requirements of section 311(j) of the FWPCA, and possible regulatory approaches. In addition, the ANPRM raised 59 questions for the public comment. The Coast Guard received 172 comments. Each of the comment letters was considered in developing this NPRM.

Public Comments at Response Plan Workshop

In addition to accepting written comments concerning the development of regulations for vessels response plans, a public workshop was held in Washington, DC on November 14, 1991. A total of 196 persons participated in the workshop. During the workshop, the Coast Guard summarized the written comments received in response to the ANPRM and solicited additional input on specific issues.

The workshop focused on four specific issues identified in advance by the Coast Guard. These issues were: (1) Defining Response to the "Maximum Extent Practicable" and "Adverse Weather;"(2) Response Resource Capability Assessment; (3) Tank Vessel-Carried Equipment; and (4) Prince William Sound Equipment and Personnel Requirements under Tank Vessel and Facility Response Plans. The recommendations from this workshop were considered when developing this NPRM.

Audio tapes, a transcript of the plenary sessions, and a summary of the proceedings of the workshop are available for review and copying in the public docket as described under "ADDRESSES."

Recommendations of Oil Spill Response Plan Negotiated Rulemaking Committee

Because of the need for additional information to assist with the development of this proposed rule, the Coast Guard published a Notice of Intent to Form a Negotiated Rulemaking Committee on November 18, 1991 (56 FR 58202). Based on the comments received on this notice, the Coast Guard established the Oil Spill Response Plan Negotiated Rulemaking Committee. A Notice announcing the establishment of the Committee was published on January 10, 1992 (57 FR 1139). Twenty-six organizations participated on the Committee. The Coast Guard was a member of the Committee.

Committee sessions were held between January 8th and March 27th, 1992. The Committee was charged with considering five issues: Definition of "maximum extent practicable"; definition of "adverse weather" for purposes of determining recovery capacity of removal equipment; applicability of requirements to various categories of vessels that carry oil in bulk as cargo, contractor certification; and carriage of discharge removal equipment. The Committee considered a number of options and alternatives during its discussions that were not included in their final recommendations. The consensus recommendations included in the final report of the Committee reflects the agreement of all Committee members and were used when drafting the proposed rule. Contractor certification and discharge removal equipment carriage will be the subject of separate NPRMs.

In establishing the Committee, the Coast Guard agreed to use any consensus recommendations of the Committee as the basis for the NPRM to the maximum extent possible consistent with its legal obligations. The Coast Guard also agreed to draft the proposed regulation and preamble having the same substance and effect as the

Committee's recommendations. The Committee will reconvene after the close of the public comment period to review comments on their recommendations.

Recommendations of the Committee are identified in the preamble discussion of the proposed rule. Copies of the final Committee report of all documents considered by the Committee during its meetings are available in the public docket.

Discussion of Proposed Amendments

To ensure that all vessels subject to the requirements of the Federal Water Pollution Control Act (FWPCA) section 311(j)(5), as amended, are prepared to respond to a discharge of oil, the Coast Guard is proposing requirements that certain vessels prepare and submit oil spill response plans. These plans are necessary to identify the availability of sufficient spill response resources. The following is a section-by-section summary of the proposed amendments.

Section 155.140 Incorporation by Reference

This section incorporates by reference four standard test methods developed by the American Society for Testing and Materials (ASTM). These test methods are acceptable means to evaluate the performance capabilities of oil booms and recovery devices for purposes of § 155.1045 as discussed below. ASTM is in the process of updating these standards as well as developing new standards for response equipment performance evaluation. The Coast Guard is an active participant in this process and will revise this section as necessary to reflect any applicable standard subsequently adopted by ASTM.

This section incorporates IMO Resolution A.648(16), "General Principles for Ship Reporting Systems and Ship Reporting Requirements, Including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances, and/or Marine Pollutants." This resolution includes standard reporting formats and lists information to be included in reports made concerning pollution incidents.

This section also incorporates the "Ship to Ship Transfer Guide (Petroleum)" published jointly by the International Chamber of Shipping and the Oil Companies International Marine Forum (OCIMF) for use in developing the lightering plan required plan required by §§ 155.1035 and 155.1040. The Coast Guard solicits comments on any other appropriate standards, test procedures, or guidelines that should be considered for incorporation by reference.

Subpart D—Response Plans

Section 155.1010 Purpose

This section describes the purpose and notes that the requirements set forth in the rule are for planning purposes only and are not intended as performance standards. These criteria are to be used by a vessel owner or operator to develop a plan for the response to the vessel's worst case discharge to the maximum extent practicable.

Section 155.1015 Applicability

With certain exceptions, the requirements of this proposed subpart apply to all vessels that handle, store, or transport oil in bulk as cargo that operate on the navigable waters of the United States, or that transfer oil in a port or place subject to the jurisdiction of the United States. This includes vessels transferring oil at deepwater ports or other offshore facilities located outside the navigable waters of the United States as defined in 33 CFR 2.05–25. It includes vessels that transit in innocent passage through the navigable waters. The public should be aware that legislation is pending that would extend the seaward boundary of the navigable waters from the current 3 miles to 12 miles. Vessels in innocent passage through the exclusive economic zone are not covered. The requirements apply to vessels that carry oil in bulk as their primary cargo, as well as vessels that carry oil in bulk as a secondary cargo in any quantity. The requirements also apply to vessels carrying non-petroleum oil as cargo.

Vessels involved in oil cargo lightering operations whose cargo is destined for a port or place subject to the jurisdiction of the United States must operate in compliance with FWPCA section 311(j) and must conform to the response plan requirements in the proposed rule. This includes both the delivering and receiving vessel.

The Coast Guard proposes to exclude certain vessels from response plan requirements. The definition of vessel in section 311(a) of the FWPCA excludes public vessels. Also excluded are vessels that, although designed or constructed to carry oil in bulk as cargo, are not carrying oil as cargo or cargo residue. The Coast Guard proposes to apply the requirements for response plans only to those vessels actually engaged in oil carriage. Thus, vessels that are in lay-up status in U.S. waters, vessels carrying cargoes other than oil, or vessels that enter U.S. waters without oil cargo or cargo residue aboard for repairs or reconstruction at a shipyard or other location will not be required to have response plans. While vessels that are not transporting oil as cargo are exempt, these vessels will require response plans if they are used for oil storage.

The proposed rule excludes dedicated oil spill response vessels when operating in a response area from response plan requirements. The Coast Guard proposes to exclude these vessels because their operations involving the carriage of oil occur only in conjunction with spill response activities. Oil spill removal organizations that commit resources to dedicated service as response vessels enhance the nation's ability to respond to spills. Excluding them from response plan requirements when operating within a response area provides an incentive to develop and maintain this specialized capability. Requiring such vessels to have their own response plans could result in fewer such resources being available and would be contrary to the purpose and intent of OPA 90 to improve capability. Such vessels will be subject to response plan requirements when these vessels are engaged in transportation of oil outside of the response area.

Vessels of opportunity will not be required to have response plans while engaged in oil spill response activities. Requiring response plans would discourage their participation and reduce the number of vessels available to respond to a spill.

Even if exempted from these proposed rules, a vessel with an oil capacity exceeding 250 barrels is still subject to the applicable pollution prevention and oil transfer requirements of 33 CFR parts 155 and 156.

This subpart also applies to a U.S. flag vessel that always operates outside the Exclusive Economic Zone of the United States. Although not required by section 311(j)(5) of the FWPCA to have a response plan, regulation 26 of Annex I to the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 related thereto, as amended (MARPOL), requires these vessels to have approved shipboard emergency plans. The Act to Prevent Pollution From Ships (33 U.S.C. 1901 *et seq.*) provides the authority to implement the MARPOL requirements for these vessels. As noted in the preamble discussion for § 155.1030, the Coast Guard is proposing to implement the MARPOL Annex I, Regulation 26 requirements through this rulemaking. The proposed rule would apply the requirements of this subpart, except for identification and contracting of response resources, to such vessels.

Section 155.1020 Definitions

This section would add definitions that are based on the FWPCA, other regulations, recommendations made by the Negotiated Rulemaking Committee, or devised by the Coast Guard to cover other terms used in this subpart. The definitions are only applicable to this subpart.

Adverse Weather: The proposed definition was recommended by the Negotiated Rulemaking Committee. Adverse weather means the weather conditions to be used for planning purposes when identifying equipment and systems in a response plan. The specific requirements for planning are found in § 155.1050.

Bulk: The proposed definition includes any volume of oil carried aboard a vessel in integral tanks, and marine portable tanks or independent tanks if they are filled or discharged while aboard the vessel.

Cargo: The proposed definition covers any quantity of oil transported in bulk aboard a vessel that is off-loaded at a destination, including transfers of oil from fuel tanks to other vessels or facilities. This includes vessels that are not certificated under 46 CFR subchapter D that transfer oil from their fuel tanks. The definition excludes oil carried aboard the vessel for use as fuel for any equipment, machinery, or boats transported aboard the vessel. Also excluded is oil transferred from a towing vessel's fuel tanks to a vessel in its tow for use in operating machinery. This transfer is not deemed cargo since it is essentially ship stores for the operation of the tow rather than being transported for off-loading at a destination. A towing vessel that transfers fuel to a vessel that is not in its tow, such as a midstream refueling operation, is subject to response plan requirements for vessels carrying oil as a secondary cargo. As proposed, the definition applies to any quantity of oil off-loaded at a destination. The Coast Guard solicits comments on whether there should be a minimum quantity of oil that should be excluded from the definition of cargo.

Contract or Other Approved Means: The proposed definition provides four methods that a vessel owner or operator can use to establish evidence of compliance. These are a written contractual agreement, self-certification, or active membership in a local or regional spill removal organization. A memorandum of understanding or basic ordering agreement that does not bind the response contractor or spill removal organization to a specified level of planned performance does not meet this requirement. Finally, the identification of such an organization without a formal contract is acceptable, but only if authorized by a specific section of this proposed regulation and consented to by the response organization.

Operator: The proposed definition is derived from 33 CFR part 130. The operator of a towing vessel is not considered the operator of a vessel being towed.

Owner: The proposed definition is derived from 33 CFR part 130.

Qualified Individual: The proposed definition describes the specific requirements that this individual must meet. Section 311 (j)(5) of the FWPCA specifies that this individual must have full authority of the vessel owner or operator to implement the response plan, contact and if necessary, contract with the response resource identified in the plan, and serve as liaison with the Federal On-Scene Coordinator. This individual must speak and understand English, be located in the United States, and be available on a 24-hour basis. This excludes persons aboard the vessel. While the term qualified individual is used, the vessel's owner or operator may designate an organization to carry out these responsibilities.

Oil Spill Removal Organization: The proposed definition includes any for-profit or not-for-profit contractors, cooperatives, or in-house resources established in a geographic area to provide required response resources.

Spill Management Team: The proposed definition describes the personnel that will staff the organizational structure that a vessel or operator must identify in their response plan. This team will manage the response actions of the vessel owner or operator and the oil spill removal organizations identified in a plan.

Response Area: The proposed definition, based on a recommendation by the Negotiated Rulemaking Committee, was included because it indicates where a dedicated response vessel can operate during a spill response activity without a response plan. It covers any COTP zones or smaller planning area, as applicable, in which spill response activities are occurring.

Dedicated Response Vessel: The proposed definition, recommended by the Negotiated Rulemaking Committee, describes a vessel whose service is limited exclusively to oil spill response activities and response-related escorting. Vessels meeting this definition are excluded from this proposed rule or are subject to reduced requirements.

Vessel of Opportunity: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee. These vessels are used during a spill response to provide platforms for skimmers and other response equipment. These vessels will be exempted from response plan requirements while engaged in spill response activities in the response area.

Higher Volume Port Area: The Negotiated Rulemaking Committee recommended that the Coast Guard identify those ports where greater response capability is necessary. This is fully explained in § 5.1050.

Maximum Extent Practicable: The proposed definition was based on a recommendation drafted by the Negotiated Rulemaking Committee. The definition serves as a cross reference to proposed § 155.1050 which contains the detailed criteria.

Average Most Probable Discharge: The proposed definition was recommended by the Negotiated Rulemaking Committee based on a review of Coast Guard historical spill data from tank ships and tank barges. From 1985 to 1989, approximately 95 percent of the petroleum oil spills from each of these vessels were 50 barrels or less. This includes both cargo and fuel spills occurring during routine vessel operations as well as casualties.

Maximum Most Probable Discharge: The proposed definition, based on a recommendation by the Negotiated Rulemaking Committee, is based on a review of Coast Guard historical spill data from tank ships and tank barges. From 1985 to 1989, approximately 98 percent of the petroleum oil spills from these vessels were 2500 barrels or less. This includes both cargo and fuel spills occurring during routine vessel operations as well as casualties. Thus the proposed rule establishes the maximum most probable discharge volume as 2500 barrels or 10 percent of the oil cargo capacity of the vessel, whichever is less.

Substantial Threat of Such a Discharge: The proposed definition is included because vessel owners and operators are required to plan for incidents that may not result in an oil discharge. This definition is consistent with the International Maritime Organization guidelines for the development of shipboard oil pollution emergency plans.

Non-Persistent Oil: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee. The definition is drawn from the International Oil Pollution Compensation Fund guidelines, which uses distillation percentages at time of shipment to distinguish between persistent and non-persistent oils. It differentiates between the physical

characteristics of persistent and non-persistent oils. Non-persistent oils tend to be more volatile and evaporate very rapidly. The response equipment and methods required are typically different than those for persistent oils. While each oil must be evaluated, generally gasolines, naphtha, kerosene, jet fuel, gas oil, automotive diesel, and number 2 diesel fuel would meet this definition. The International Tanker Owners Pollution Federation (ITOPF) classifies non-persistent oils as Group 1 as indicated in appendix B to part 155. Certain non-petroleum oils would also be classified as non-persistent based on their specific gravity.

Persistent Oil: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee. It differentiates between the physical characteristics of oils. Persistent oils tend to emulsify and do not dissipate as rapidly as non-persistent oils. This affects the equipment and methods required to respond to the discharge. The definition covers all oils that do not meet the criteria for classification as non-persistent oils. Persistent oil includes marine diesel, number 4 and 6 oils, lubricating oils, asphalt, other residual fuel oils, and crude. The International Tanker Owners Pollution Federation (ITOPF) classifies these as Group 2, Group 3, or Group 4 as noted in appendix B to part 155. The proposed subdivision of persistent oils into these three groups goes beyond the Committee recommendation. The Committee recommended that only one category of persistent oil be used. However, the Committee also recommended that the proposed rule account for emulsification of oils, noting that emulsification varies with the relative persistence of the oil. The Coast Guard's opinion is that using the three ITOPF categories for classifying persistent oil better reflects the variability in dissipation and emulsification of persistent oils. If only one category is included, the factors used to reflect dissipation and emulsification in this proposed rule would need to be set conservatively to avoid underestimates of planning volumes. The Coast Guard's opinion is that using such an approach would unfairly penalize a vessel owner or operator that carries a "less persistent" oil. The use of the three categories provides for more equitable coverage. The Coast Guard solicits comments on this categorization of persistent oils. Certain non-petroleum oils would also be classified as persistent oils and assigned oil groups based on specific gravity.

Vessels Carrying Oil as a Primary Cargo: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee to vary the response plan requirements based on the principal purpose of a vessel. It includes all vessels having a Certificate of Inspection under 46 CFR subchapter D (except for dedicated response vessels), a Certificate of Compliance, or a Tank Vessel Examination Letter. These vessels would be subject to the most stringent response plan requirements.

Vessels Carrying Oil as a Secondary Cargo: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee to vary the response plan requirements by the purpose of a vessel. It covers inspected vessels that are not certificated under 46 CFR subchapter D, but have been authorized to carry certain types and quantities of oil or oil-based products under other authorities. It also covers foreign vessels carrying these oils as a secondary cargo as authorized by an International Oil Pollution Prevention (IOPP) or Noxious Liquid Substance (NLS) certificate required by 33 CFR 151.33 or 151.35. The definition would also apply to any other uninspected vessel that carries oil in bulk as cargo as defined by this subpart.

Inland Area: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee and is included to define the geographic boundaries of an area for identifying response times and equipment operating capability criteria. The existing boundaries used in 33 CFR part 80 and 46 CFR part 7 are the basis for the seaward limit of this area.

Rivers and Canals: The proposed definition is based on a recommendation by the Negotiated Rulemaking Committee and is included to define the geographic boundaries of inland area where shallow draft vessels operate. This area is used for identifying response times and equipment operating capability criteria. The Negotiated Rulemaking Committee did not recommend a specific water depth or draft to use in defining these waters. The Coast Guard proposes to use the controlled navigable depth of 12 feet or less as the method of identifying these waterways. Most of these waterways are in protected areas and reflect conditions different from those found in other waterways. The use of 12 feet or less would limit the waterways that were covered by this definition to those where non-oceangoing vessels operate, such as the Intracoastal Waterway, Western Rivers Systems and other similar areas. The Coast Guard solicits comments on whether this is a reasonable method to differentiate between rivers or canals and other inland areas.

Nearshore Area: The proposed definition, recommended by the Negotiated Rulemaking Committee, defines the geographic boundaries of an area used for identifying response times and equipment operating capability criteria. The area is from the existing boundaries in 33 CFR part 80 and 46 CFR part 7 to 12 miles seaward. This area is close to shore, thus requiring more rapid response times and planning for protective actions.

Offshore Area: The proposed definition, based on a recommendation by the Negotiated Rulemaking Committee, is included to define the geographic boundaries of an area generally located between 12 and 50 nautical miles from shore used for identifying response times and equipment operating capability criteria. This area is farther from shore, thus the risk to the shoreline is reduced. This reduced risk is reflected in the planning criteria for vessels operating in this area.

Open Ocean: The proposed definition, based on a recommendation by the Negotiated Rulemaking Committee, defines the geographic boundaries of an area generally located between 50 and 200 nautical miles from shore. This area is used for identifying response times and equipment operating capability criteria. It extends out to the seaward limit of the United States Exclusive Economic Zone. This area is far from shore, thus the risk to the shoreline is reduced. This reduced risk is reflected in the planning criteria required for vessels operating in this area.

Ocean: The proposed definition, based on a recommendation by the Negotiated Rulemaking Committee, is used to identify response plan equipment operating criteria applicable to all waters seaward of inland areas.

Great Lakes: The proposed definition was taken from 46 CFR 10.103.

Exclusive Economic Zone: The proposed definition is based on the one in section 1001 (8) of OPA 90. It describes this zone as defined in Presidential Proclamation 5030 of March 10, 1983. This zone extends 200 miles from the territorial sea baseline unless a maritime boundary with another country is closer than 200 miles.

Section 155.1025 Operating Restrictions and Interim Operating Authorization

Vessel owners or operators covered by this subpart shall submit a response plan and have it approved by the Coast Guard before they may handle, store, or transport oil. Section 4202(b)(4) of OPA 90 phases in this requirement. Response plans must be submitted no later than February 18, 1993, for vessels operating prior to that date. Such vessels must be operating in full compliance with a plan approved by the Coast Guard by August 18, 1993. A vessel entering service after February 18, 1993, must submit a response plan prior to handling, storing, or transporting oil, and must also be operating in compliance with an approved plan by August 18, 1993. Vessels entering service after August 18, 1993, must be operating in compliance with an approved plan prior to handling, storing, or transporting oil.

While the above dates implement the statutory requirements for vessels to operate with approved response plans, section 311(j)(5)(F) of the FWPCA allows the Coast Guard to authorize a vessel to operate for up to 2 years after a plan is submitted for approval if the owner or operator certifies that they have identified and ensured the availability of, through contract or other approved means, the necessary private personnel and equipment to respond to the maximum extent practicable to a worst case discharge. This provides an interim period in which the vessel may continue to operate before the approval process is completed, recognizing that the Coast Guard may be unable to complete the plan review and approval process before approved plans are required.

The proposed rule would provide a 2 year authorization for vessels to operate pending plan approval if they certify that they have identified and ensured the availability of through contract or other approved means, the response resources required by this subpart. This certification would normally occur as part of the initial plan submission. Since plans must be submitted for existing vessels by February 18, 1993, 6 months before the date for compliance with the plan, all of the required response resources may not be in place. Such vessel owners or operators may submit this certification separately prior to August 18, 1993, or they may note the resources that are not in place when they submit their plan in February. All response resources must be in place by August 18, 1993, for the vessel to continue to operate past that date.

The required certification can be included either in a letter accompanying the plan or in a separate request. In either case, the request must identify the same information on these resources that is required to be submitted with the response plan. Information contained in the plan does not need to be repeated.

Under the proposed rule, a vessel's authorization to operate is void if: The Coast Guard determines that the response resources included in the certification do not meet the requirements of this subpart; the identified resources are no longer covered by a contract or other approved agreement with the vessel owner or operator; the vessel is not operating in compliance with the submitted plan; or the 2 year period expires. Measures taken for vessels not operating in compliance with a plan are described in 33 CFR 155.1065.

Section 155.1025 would also allow the Captain of the Port (COTP) to authorize vessels without an approved response plan to make a single voyage to a port or geographic area. This authorization could be requested for vessels whose plans do not cover a particular port or vessels making an initial visit to a U.S. port. This authorization is intended for vessels in the spot charter market whose destination may change en route, not for use by vessels on planned voyages or in liner service.

To qualify for this single voyage authorization, a vessel must have aboard either: A response plan that meets all of the requirements of this subpart, except for the geographic-specific information for the port; or a shipboard emergency plan that has been approved by the flag state of the vessel as meeting the requirements of MARPOL Annex I, Regulation 26. The MARPOL Annex I, Regulation 26 plan contains most of the shipboard elements of the vessel response plan required in this proposed rule. The vessel owner or operator shall also identify and inform the vessel crew and COTP of the designated qualified individual, and certify that they have identified and ensured the availability of, through contract or other approved means, the response resources required by this subpart for the applicable port or geographic area in which the vessel intends to operate. This request may be submitted to the COTP via telex; however, the response resources must be specifically identified.

155.1030 General Response Plan Requirements

This section of the proposed rule lists the general requirements for all response plans. These requirements differentiate between vessels that carry oil in bulk as a primary cargo, vessels carrying oil in bulk as a secondary cargo, and unmanned tank barges. There are separate sections in the proposed rule that address the detailed requirements to be met by each type of vessel.

The proposed rule sets out the requirements for these vessels separately so that commenters can focus on the proposed requirements for each type of vessel. The Coast Guard may reorganize the format of the final rule to include common components of the plans in one section, only listing the requirements unique to unmanned tank barges or secondary cargo carriers in a separate section, as opposed to restating the entire list of requirements. The Coast Guard solicits comments on this format.

Response plans must be prepared in English, and if applicable, in a language understood by crew members with responsibilities under the plan. This will most often be the officers aboard the vessel.

The general response plan requirements include 10 sections: General information and introduction; notification procedures; shipboard spill mitigation procedures; shore-based response activities; list of contacts; training procedures; drill procedures; plan review and update procedures; vessel-specific appendices; and geographic-specific appendices for each COTP zone in which the vessel stores, handles, or transports oil. Vessel owners or operators are encouraged to use checklists, flowcharts, and other methods to facilitate the use of response plans in an emergency.

The proposed requirements are based on the "Guidelines for the Development of Shipboard Oil Pollution Emergency Plans" adopted by IMO at the Marine Environment Protection Committee meeting in London in March 1992, implementing MARPOL Annex I, Regulation 26. This regulation requires oil tankers of 150 gross tons or over and every other ship of 400 gross tons or over to carry an approved oil pollution emergency plan on board. This requirement is effective on April 4, 1995 for existing vessels and any new vessels delivered prior to April 4, 1993. New vessels delivered after April 3, 1993, must have an approved plan onboard prior to entering service. The MARPOL requirements apply to all such vessels regardless of whether they carry oil in bulk as cargo. The requirements are also based on the "Guidelines for the Preparation of Shipboard Oil Spill Contingency Plans" published in 1990 by OCIMF and the International Tanker Owners Pollution Federation (ITOPF).

Most comments to the ANPRM recommended that these documents form the basis for the response plan regulations. The format in the proposed rule is intended to implement the requirements of MARPOL Annex I, Regulation 26, as authorized by section 3 of the Act to Prevent Pollution From Ships (33 U.S.C. 1903), and section 311(j)(5)(C) of the FWPCA for vessels carrying oil in bulk as cargo. Regulations implementing MARPOL Annex I, Regulation 26 requirements for vessels not subject to this proposed rule will be published at a later date. The Coast Guard solicits comments on this approach for implementing the MARPOL Annex I, Regulation 26 requirements.

A number of comments recommended that the response plan requirements include other topics such as identification of sensitive areas and detailed geographic-specific response strategies. These topics will be addressed in the Area Contingency Plans. The vessel response plan addresses the responsibilities of the vessel crew to notify appropriate government and company officials and to minimize or mitigate an oil discharge from the vessel; management of the response by the vessel owner or operator; and response resources that have been identified in advance by the vessel owner or operator.

The proposed rule also requires that an owner or operator of unmanned tank barges prepares a separate notification and emergency action plan to be carried aboard the barge. These requirements are discussed under § 155.1040.

The proposed rule notes that a response plan for a dedicated response vessel that operates outside of the response area as defined in this proposed rule must be in the same format as a vessel carrying oil as a secondary cargo.

Response plans must be submitted in a specific format. This format is consistent with that required by MARPOL 73/78 Annex I, Regulation 26. Since many vessel owners or operators already have response plans, or will be preparing them before the final rule is published, the proposed rule provides for acceptance of existing plans in a different format until the next required resubmission date. Required resubmission dates are contained in § 155.1070. Response plans that qualify for this acceptance must include a cross-reference that shows the location of required plan sections to facilitate review and use in an emergency.

A response plan must be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR part 300) and applicable Area Contingency Plans (ACP). The Coast Guard will review the plan for consistency. Section 155.1050 requires the vessel owner or operator to identify and ensure the availability of, by March 1998, through contract or other approved means, certain response resources listed in the ACP.

155.1035 Response Plan Requirements for Vessels Carrying Oil as a Primary Cargo

These requirements apply to all vessels that carry oil as a primary cargo, except for unmanned tank barges. Unmanned tank barges and vessels that carry oil as a secondary cargo are covered by separate sections. This section would also apply to vessels that carry non-petroleum oils as their primary cargo.

The general information and introduction section of a response plan contains information on the vessel, its owner or operator, a listing of the geographic areas covered, a table of contents, and record of changes page.

The notification procedures section contains information on notifications that must be made in the event of a vessel casualty. While some of the notifications should be in geographic-specific appendices, this section should: summarize notification requirements, identify responsibilities, procedures, and communication methods to be used, and information to be provided. Notification information should follow the recommendations of IMO Resolution A648(16). This section contains procedures for notifying the qualified individual designated to represent the vessel's owner or operator. Much of this information can be provided in checklist format. It is not necessary to provide individual names if the information is already provided in the list of contacts section of the response plan or in a geographic-specific appendix.

The shipboard spill mitigation procedures section of a response plan summarizes the actions to be taken by the vessel's crew in the case of an actual or substantial threat of an oil discharge. This section must address potential and actual discharges of both oil cargo and fuel. Although section 311(j)(5) of the FWPCA focuses primarily on oil carried in bulk as cargo, MARPOL Annex I, Regulation 26 applies to both oil cargo and fuel. The plan must address discharges that may result from onboard operations (i.e. internal or external cargo or fuel transfers) as well as those resulting from casualties or emergencies. The proposed rule lists specific situations that must be covered in the plan. Checklists or other simple procedures are appropriate for this section.

The response plan must identify crew actions necessary for the assessment of damage stability and hull stress, as well as information to be collected for use by shore-based personnel. Crew training for these actions may vary greatly, and the response plan must take this into account. The response plan must identify the location of the information necessary for damage assessment and stability calculations. A copy of this information must be maintained ashore by either the vessel owner or operator or the vessel's recognized classification society, unless the applicable information is available in a shore-based damage stability and residual strength calculation program that can be accessed 24 hours per day. This is to ensure that information is available if the information aboard the vessel is destroyed or inaccessible.

The Negotiated Rulemaking Committee recommended that tankers have: A lightering plan with operational checklists, a station bill, and identified sources of specific equipment required for vessel-to-vessel lightering. The proposed rule would require procedures for both internal and ship-to-ship transfers. The Ship-to-Ship Transfer Guide (Petroleum) published jointly by the International Chamber of Shipping and OCIMF is proposed for incorporation by reference. This guide covers ship-to-ship transfers using cargo systems and contains numerous checklists and procedures to be for such transfers. The plan requires transfer procedures followed if any of a ship's systems are damaged, including the use of over-the-top pumping, gravity shifting of cargo, emergency use of void spaces or ballast tanks, etc. The plan must also identify the sources of fendering equipment, transfer hoses, portable pumps, lightering or mooring masters, and vessel or barge brokers. Section 155.1050 specifies which equipment must be contracted for in advance. Lightering plans may be maintained separately from the response plan; however, at a minimum the response plan must address the safety considerations. Emergency lightering or cargo transfer must be done only by trained personnel who are capable of evaluating effects on the vessel's stability, hull stress, potential flammability of the cargo, and other factors. The Coast Guard solicits comments on any reference guide for internal vessel transfers that may be considered for incorporation by reference in the final rule.

The plan must identify the location, crew responsibilities, and procedures for

use of any emergency towing equipment or oil discharge removal equipment aboard the vessel. Although this proposed rule does not require the carriage of equipment, some vessels have transfer pumps, boom, skimmers, and other equipment for use in an emergency.

The response plan section on shore-based response activities must address actions to be taken by the vessel owner or operator, to manage the response to an actual or threatened discharge. The plan must address: any crew responsibilities to initiate response actions; responsibilities and authorities of the designated qualified individual; and procedures for coordinating response actions with those of the predesignated Federal On-Scene Coordinator.

The response plan must also identify the organizational structure that will be used to manage response efforts. Recognizing the need for an organizational infrastructure, the Coast Guard proposes that each response plan contain certain organizational elements that are essential to the successful management of a response operation. A number of comments on the ANPRM requested that the proposed rule require the use of the Incident Command System (ICS) under the National Interagency Incident Management System (NIIMS). The proposed rule does not require the use of ICS. It allows the vessel owner or operator to develop their own organizational structure provided that the organization elements listed are addressed. The structure must be compatible with the organization embodied in the NCP. Some large vessel owners or operators will be able to staff their organizational structure with in-house resources; others will rely on contracted support. Either method is acceptable. The proposed rule would also require identification of the personnel necessary to staff this organizational structure for the first 7 days of a response.

The plan must identify and ensure the availability of resources, through contract or other approved means, necessary to respond to the average most probable discharge, and to the vessel's maximum most probable and worst case discharges. Section 155.1050 of the proposed rule describes the procedures for determining these resources. Resources must be identified for each COTP zone in which a vessel operates. Since most resources will vary based on location, this information should be maintained in a geographic specific appendix.

The proposed rule requires identification of the location of equipment, personnel, and support services available to meet the response resource requirements. One of the recommendations of the Negotiated Rulemaking Committee was to establish a process for response contractor approval that would allow the response plan to identify "approved" response resource providers in lieu of listing all of the response resources. The Coast Guard will be publishing a separate rulemaking that addresses acceptability of response resource providers, and will incorporate any provisions that affect these requirements in the final rule.

The proposed rule would require a section listing contacts available 24 hours a day to assist during a response. This should be a separate section of the plan since it is most likely to require routine revisions. This section will not be required if the same information is included in each geographic-specific appendix. The list of contacts includes: the vessel owner, operator, or charterer, insurance representatives; local agents; marine surveyors; the qualified individual; and the providers of the identified response resources.

Response plans must include a section to address the training program and procedures to ensure that all personnel with responsibilities under the plan are trained as specified in § 155.1055.

Response plans must include a section to address the drill program of the vessel owner or operator to ensure that the plan will function in an emergency as specified in § 155.1060.

The response plan must include a section addressing the procedures for review and update of the plan by the vessel owner or operator. This includes meeting the requirements of § 155.1070, as well as describing the procedures for review after plan use to evaluate effectiveness.

The response plan must contain a geographic-specific appendix for each COTP zone in which the vessel operates. This includes transit areas within the Exclusive Economic Zone. This appendix must contain information on notifications, identify the qualified individual, and identify the response resources required to meet the average most probable discharge, maximum most probable discharge, and worst case discharge scenario for the applicable geographic area. A geographic-specific appendix allows for easy updating of information and facilitates review of the plan by the appropriate COTP.

The response plan must contain an appendix for vessel-specific information. This information covers ships systems; oil cargo and fuel type, stowage, and safety information; and certain vessel plans. Much of this information can be maintained on the vessel separately from the response plan, provided there is a cross-reference to the location of this information.

Section 155.1040 Requirements for Unmanned Tank Barges

This section of the proposed rule contains detailed response plan requirements for unmanned tank barges. While most of the components of the plan are similar to those required of other vessels that carry oil as a primary cargo, there are significant differences. Since unmanned tank barges have personnel aboard only during transfer operations, sections of the plan that address actions of the vessel's crew do not generally apply. In addition, the nature of operation of these vessels is different. Barges are moved by towing vessels that are operated by the barge owner, part of a fleeting operation, or contracted through an independent towing vessel operator. They may have a dedicated towing vessel or move as part of a multiple-barge tow. Because of this, the proposed rule would require response plans for unmanned tank barges to contain two parts: An abbreviated notification and emergency action plan carried aboard the barge, and a core response plan maintained by the owner or operator of the barge. The Coast Guard considered including all tank barges under this proposed section, but is of the opinion that personnel aboard manned tank barges may be able to carry out a number of responsibilities (i.e. internal cargo transfer, damage assessment, etc.) not covered by this section. The Coast Guard also solicits comments on whether this section should apply to all tank barges. The Coast Guard solicits comments on this two part formatting option.

The notification and emergency action part of the response plan carried aboard the unmanned tank barge covers notification procedures for the tank barge owner or operator, qualified individual, and the National Response Center. It would specify information necessary for notification and identify the responsibilities of the personnel of the towing vessel, fleeting area, or facility at which the barge is moored after an actual or threatened oil discharge. The tank barge owner or operator would be responsible for ensuring that the necessary information for notification and initial action is available. It is the tank barge owners responsibility to ensure that the notification component of the response plan can be implemented in an

emergency by the towing vessel. Custody of a tank barge by a towing vessel does not transfer responsibility for meeting the requirements of this proposed subpart. It must be noted that nothing in this section modifies the existing responsibility of the towing vessel operator to notify the National Response Center of an oil discharge as the person in charge of the barge.

The part of the plan carried aboard the tank barge would be stowed in the documentation container. The Coast Guard considered requiring the towing vessel to maintain a copy of this plan component, but concluded that the nature of unmanned tank barge operations would make this impractical. Responsibility for the handling of a tank barge may shift numerous times during transit between multiple towing vessels, fleeting areas, and facilities. The likelihood is high that a plan that had to be passed from vessel to vessel would be easily misplaced. While it may be prudent for the tank barge owner or operator to provide copies of the tank barge plan to the towing vessel to ensure that plan responsibilities are carried out, the proposed rule does not require this.

The part of the response plan retained by the tank barge owner or operator follows the same general format as that required for primary oil carriers. The primary differences are: The plan can cover multiple tank barges; notification procedures must identify the respective responsibilities of the persons having custody of the barge vessel, the tank barge owner or operator, and the qualified individual; the identification of responsibilities of the tankerman to mitigate or prevent discharges resulting from operations aboard the barge; and identification of responsibilities of the custodians pending the arrival of the qualified individual or other representative of the tank barge's owner or operator. The plan must have separate appendices for each type of tank barge covered by the plan, as well as a geographic-specific appendix for each COTP zone in which tank barges covered by the plan operate.

Section 155.1045 Requirements for Vessels That Carry Oil as a Secondary Cargo

These requirements apply to all vessels that carry oil as a secondary cargo as defined in 33 CFR 155.1020. The Negotiated Rulemaking Committee recommended that the Coast Guard take into account the relative risk of harm to the environment that may result from the discharge of a vessel's oil cargo when setting response plan requirements. This risk of harm is affected by the type and quantity of oil being carried as cargo. The Committee recognized that vessels carrying oil as a primary cargo posed a much greater risk than those carrying oil as a secondary cargo. Most of the vessels carrying oil in bulk as a secondary cargo, such as fish processing vessels, offshore supply vessels, cargo vessels, and some towing vessels, carry limited quantities of mostly non-persistent oils. These oils tend to dissipate rapidly into the environment.

The Committee recommended that, if covered by the response plan requirements of OPA 90, these vessels be required to maintain response plans that reflect the reduced risk posed by such vessels. The statute requires their inclusion if they carry oil in bulk as cargo. While it is difficult to estimate the actual numbers, the Coast Guard estimates that over 1,000 of the approximately 1,800 oil field supply vessels may be involved in the carriage of oil in bulk as a secondary cargo as defined in this subpart. This includes transfers of a portion of their fuel to offshore platforms and the carriage of oil-based drilling fluids. Coast Guard spill data for both oil cargo and fuel from 1981 to 1988 reports 503 spill incidents involving such vessels, with 88 percent being less than 100 gallons.

Fishing vessels that carry oil in bulk as cargo are also included. Although there are an estimated 28,000 documented fishing vessels and 90,000 state-registered fishing vessels, the Coast Guard estimates that only 80–100 are engaged in the carriage of oil in bulk as a secondary cargo. Coast Guard spill data for both oil cargo and fuel from 1981 to 1988 reports 3,106 spill incidents involving all fishing vessels, with 90 percent being less than 100 gallons. There is no way to identify which of these spills involve vessels potentially subject to this rule.

With regard to towing vessels, the Coast Guard estimates that only a small number of towing vessels are involved in the carriage of oil in bulk as cargo. While up to 25 percent of the 5,703 towing vessels may be involved in non-routine transfers of small quantities of fuel to other vessels, most of these transfers are to barges within their tow and the oil transferred would not be deemed cargo under the proposed rule.

The Coast Guard has little information on the number of cargo vessels that carry oil in bulk as a secondary cargo. Vessels in this trade carry primarily non-petroleum oils. The Coast Guard solicits information on these and any other vessels that would be subject to the requirements of this section.

This section would also apply to dedicated response vessels when operating outside of the response area. As discussed earlier, they have been excluded from the regulations when operating inside the response area. Movement of recovered oil outside of the response area would generally not be managed as part of the primary spill response, thus requiring a response plan to address the spills.

The Committee recommended that requirements for secondary cargo carriers be based on the volume of oil carried as cargo to differentiate the relative risk of these vessels: 100 barrels, 1000 barrels, and 5000 barrels of cargo are proposed as the categories. Each vessel that is subject to this subpart must prepare a response plan that covers the requirements applicable to the volume of cargo carried.

Some of the vessels covered under this section transfer a portion of the oil in their fuel tanks as cargo. The proposed rule requires that vessels transferring cargo from their fuel tanks use 50 percent of their fuel tank capacity to determine the level of response requirements that will apply. This is a conservative estimate of the quantity of fuel that may be transferred as cargo during a voyage. The Coast Guard solicits information on the volumes and frequencies of oil transfers from such vessels and the percentage of fuel capacity that may be transferred as cargo during a voyage.

The response plan format required for secondary cargo carriers is similar to that required for vessels carrying oil as a primary cargo. It includes: General information; notification procedures; shipboard spill mitigation procedures; shore-based response activities; a list of contacts; training procedures; drill procedures; plan review and update procedures; and geographic-specific appendices.

The requirements for the general information and notification section of the plan are the same as those for primary oil carriers.

The requirements for shipboard spill mitigation procedures vary based on the volume of oil cargo. Vessels carrying 100 barrels or less of oil cargo would only be required to have a basic emergency action checklist covering notification and emergency actions. Vessels carrying over 100 but less than 1,000 barrels of oil cargo are required to have procedures for actions of the vessel's crew, damage control procedures, emergency transfer procedures, and the use of onboard equipment. Vessels carrying between

1000 and 5000 barrels of oil cargo would need to have more detailed procedures. Vessels that carry over 5000 barrels of oil cargo have the same response plan requirements as primary oil carriers.

The requirements for addressing shore-based response activities primarily cover: Initial action by the crew to supervise response actions; responsibilities of the qualified individual; and coordination with the Federal OSC. A significant difference from the primary carriers is the identification of response resources. The Negotiated Rulemaking Committee recommended that vessels carrying oil as a secondary cargo be required only to identify qualified spill response resources and/or contractors in their plan, without contracts. The Coast Guard considered this recommendation when drafting the proposed rule. However, in order to comply with the statutory mandate that the availability of resources be ensured by contract or other approved means, the Notice proposes that a vessel owner or operator obtain the written consent of a response organization to be identified in a response plan. The Coast Guard recognizes that this does not create a contract between the vessel owner or operator and the response organization. The Coast Guard solicits comments in whether this type of agreement is sufficient to meet the requirements of section 311 (j)(5)(C)(iii) of the FWPCA that the plan "identify, and ensure by contract or other means approved by the President the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge", and whether other alternatives should be considered to meet this requirement.

The Coast Guard anticipates that there will be no additional costs associated with the need to obtain the written consent of a response organization before they may be identified in a plan. The Coast Guard considers that the cost of contracting for such services in advance would be inordinate given the minimal risk these vessels pose. The identification of available resources that have provided written consent to be listed will be sufficient to meet the requirements.

The list of contacts section and information in the geographic-specific appendices would be the same as for other vessels except that detailed information on available response resources would not be required.

The training section of the plan requires that personnel aboard the vessel be trained on initial assignment to the vessel and as necessary thereafter. Participation in required drills should provide sufficient refresher training.

The requirements for drills varies by oil cargo capacity. For vessels carrying 100 barrels or less of oil cargo, annual vessel drills and biennial drills of the shore-based response organization are required. Vessels carrying between 100 and 5000 barrels of oil cargo would need to have quarterly vessel drills and annual drills of the shore-based response organization. Drills required for vessels that carry over 5,000 barrels of oil cargo would be at the same frequency as primary oil carriers.

Owners or operators of vessels carrying oil as a secondary cargo would be required to resubmit their plan for review and approval every 5 years, when there is a change in cargo capacity, or a change in vessel configuration. They must provide updates to the Coast Guard and other plan holders for all other changes that occur between resubmissions. Annual review is not required.

Section 155.1050 Response Plan Development and Evaluation Criteria

This section describes response resource requirements for the average most probable discharge, maximum most probable discharge, and worst case discharge to the maximum extent practicable. Appendix B of the proposed rule contains a detailed explanation of requirements.

Section 311(j)(5) of the FWPCA requires planning for the worst case discharge only. The Negotiated Rulemaking Committee recommended that the proposed rule address operational discharges as well. The Coast Guard agrees that the response plan should also address the more common operational and casualty-related discharges which are less than the entire cargo capacity of the vessel. Section 311(j)(1)(C) of the FWPCA, which addresses prevention or containment of oil discharges from vessels, authorizes the Coast Guard to require planning also for the average most probable and maximum most probable discharge volumes.

The Committee also recommended an approach for planning requirements for the worst case discharge cargo volume to the maximum extent practicable. The Committee recommended that the following factors be considered: Loss of some oil to the environment due to evaporation and natural dissipation based on the type of oil; emulsification which may effect the quantity of material to be recovered; provision of close-to-shore response, shoreline protection, and shoreline cleanup capabilities, and limits of available response technologies and private removal capability for worst case discharges for larger vessels.

The Committee recommended placing a cap on the quantity of resources which individual vessel owners or operators are required to contract for in advance. This recognizes the limits of currently available technology and private removal capabilities. The Committee recognized the importance of early equipment arrival at the scene of a discharge and the need for tiering of equipment requirements to reflect local, regional, and national response capability. The Committee recommended that equipment mobilization occur within the first 3 days of a discharge, when oil recovery is most likely. The Committee also recommended that the owner or operator be required to identify additional resources above the cap when the worst case discharge planning volume for a vessel exceeded the caps for the contracted resources.

The Committee recommended that the caps for required contracting of response resources be increased at appropriate intervals that roughly correspond with response plan review periods. This would take into account: increased availability of mechanical recovery devices; improved equipment efficiencies or design; improved ability to track and encounter spills; improved technology to address large spill volumes; high rate response techniques such as dispersants and in situ burning, when approved by the Regional Response Team; and other techniques, such as bioremediation, if quantifiable.

The Committee acknowledged that some areas of the country are more prone to spills for a variety of reasons including, but not limited to: the amount of traffic through an area and the volume of persistent oil moved. Such areas require more rapid response.

The Committee recommended different requirements for vessels operating in the open ocean, offshore, nearshore and inland, and rivers as previously discussed. This recommendation was based on the variability of vessel traffic, proximity to shoreline, and size of vessels. The Committee recommended that deepwater ports be considered separately.

The Committee recommended that the Coast Guard consider the difference in risk posed by small vessels that carry oil in bulk as cargo, as well as recognize that a worst case discharge from any vessel is likely to occur over time and not instantaneously.

The Coast Guard has used the Committee's recommendations in drafting this section of the proposed rule; however, except when specifically noted, the proposed rule approach was developed by the Coast Guard and was not part of the Committee's final recommendations. The proposed rule describes the approach to be followed to determine the response resources that must be identified for response to a vessel's worst case discharge to the maximum extent practicable.

The proposed rule requires that vessel owners and operators consider weather conditions during preparation of a plan. Many of these conditions are area-specific and require the vessel owner or operator to refer to the applicable Area Contingency Plan for information on ice conditions, debris, temperature ranges, and weather-related visibility in which response resources must function. The proposed rule refers to Table 1 of Appendix B to part 155 for evaluating the operability of booms and oil recovery devices. These criteria are based on information from the "World Catalog of Oil Spill Response Products—Third Edition." Table 1 uses significant wave height as the primary criteria for evaluating operability of recovery equipment in different environments. Additional design criteria are included for booms. The criteria are used to evaluate equipment operability under specified conditions. They reflect conditions that may limit mechanical recovery, but would not necessarily limit other response methods or affect normal operations of a vessel.

Identified equipment must be capable of operating safely in the significant wave height criteria in Table 1. The criteria reflect limitations of equipment design, rather than limitations imposed by the specific operating environment. Because these criteria may not reflect the actual conditions in a given geographic area, the COTP may reclassify specific bodies of water within their COTP zone to a more or less stringent operating environment to reflect actual conditions. A body of water may be reclassified as a more stringent operating environment when prevailing wave conditions exceed the significant wave height criteria over 35 percent of the year. A body of water may be reclassified as a less stringent operating environment if prevailing wave conditions do not exceed the significant wave height criteria for the less stringent operating environment over 35 percent of the year. Reclassifications would be identified in the Area Contingency Plan. The classification for a given water body affects requirements for response equipment. The COTPs will evaluate water bodies within their COTP zones and will respond to specific inquiries not later than 90 days. The Coast Guard solicits comments on the use of 35 percent as the standard for reclassifying an operating environment.

The proposed rule requires all vessel owners and operators to identify response resources for the average most probable discharge as defined by the Committee. Vessels that carry oil in bulk as their primary cargo must identify sufficient boom and a means of deployment in the area of any oil transfer. Response plans must also identify the availability of oil recovery equipment and sufficient storage capacity capable of arriving at the transfer area within 2 hours of discovery of a discharge. Appendix B to part 155 contains procedures for determining these resources. The proposed rule would require vessel owners or operators to have response resources under contract to meet the 2 hour response time. This would ensure the prompt availability of equipment where it is most commonly needed, at the point of transfer.

The proposed rule would allow the vessel owner or operator to rely on equipment available at a facility, provided its use for vessel spills has been arranged by contract or other approved means. The proposed rule also permits vessels involved in vessel-to-vessel lightering to rely on common equipment.

This section sets the level of response resources that must be identified and ensured available, through contract or other approved means, to respond to spills up to a vessel's maximum most probable discharge volume. While the Committee recommendation specifically addressed planning for the maximum most probable discharge volume, the Coast Guard has modified this in the proposed rule to cover discharges of lesser volumes as well. The Coast Guard's opinion is that the Committee intended this to be the case, since approximately 98 percent of the spills from tank ships and tank barges are below this volume. In high volume port areas and the Great Lakes, these resources must be capable of arriving at the scene of a discharge within 12 hours of its discovery; within 24 hours in all other river, inland, nearshore, and offshore areas; and in 24 hours plus necessary travel time beyond 50 miles from shore for the open ocean. Response plans must identify sufficient containment boom, oil recovery devices, and oil storage capacity for this planning volume. Appendix B to part 155 contains procedures for determining resource requirements. The response plan must specify the location, type, and quantity of equipment available. As noted, this requirement will be modified in the final rule to account for any response contractor "approval" process adopted by the Coast Guard. Response resources for a maximum most probable discharge must be prepositioned to meet the required response times. The Committee recommended that this minimum capability be maintained within the general geographic area at all times. The proposed rule would authorize the COTP to approve the temporary movement of select items of equipment to a spill outside the area. Equipment movements authorized by the COTP outside the area would not affect a vessel's ability to operate in that area. A response plan would remain valid.

- The proposed rule would require vessel owners and operators to identify sufficient resources to respond to a worst case discharge to the maximum extent practicable. Appendix B to part 155 contains detailed information for calculating the planning volume for each response tier, as discussed below, and for determining the response resources which must be identified to meet these requirements. Response plans must specify the location, type, and quantity of resources. As noted, this requirement will be modified in the final rule to account for any response contractor "approval" process adopted by the Coast Guard.

The requirements for response to a worst case discharge to the maximum extent practicable are based on tiering of resources. The rule proposes three tiers which would allow for identifying of resources from outside the area to meet the requirements. On scene arrival times for these tiers reflect a Committee recommendation that resources be concentrated in areas with the highest potential for spills. These are identified as higher volume port areas. The first tier of resources must be capable of arriving at the scene of a discharge within 12 hours of its discovery. Resources for tiers 2 and 3 must be capable of arriving in 24 hour increments thereafter.

The Coast Guard proposes that the same time limits apply to the Great Lakes because of their unique environment. The rule excludes Prince William Sound because § 155.1135 of this proposed rule establishes different times for this area.

Tier 1 response resources for all locations not within a higher volume

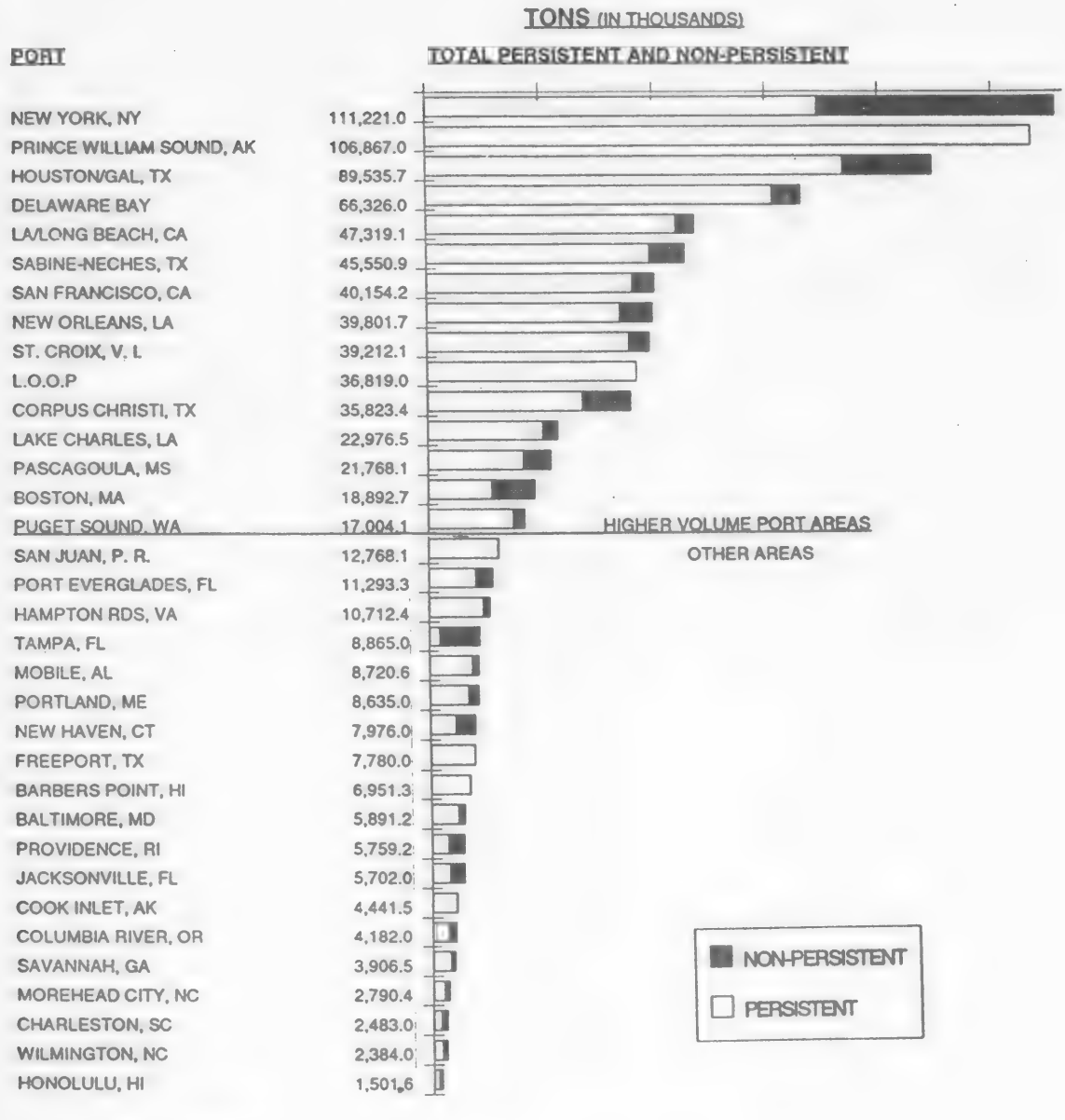
port area must be capable of arriving on scene within 24 hours from the time a spill is discovered. Resources for tiers 2 and 3 must be capable of arriving in 24-hour increments thereafter. The times take into account the outer most boundaries of these areas: a plan must account for notification, mobilization, and travel time when identifying resources capable of arriving within the required time. For open ocean areas, planners must identify equipment that can reach 50 miles from shore in the specified time. Under this proposed rule, open ocean extends up to 200 miles from shore. The Coast Guard's opinion is that it is inappropriate to set one time limit for such a large area. Using the boundary between the offshore and open ocean operating environments as proposed would provide sufficient information to identify resources without speculating where they will need to respond. A vessel owner or operator must include planned travel time beyond 50 miles in determining on scene arrival times in the open ocean. For example, the owner or operator of a vessel involved in lightering operations 70 miles from shore must identify tier 1 response resources capable of arriving to that location within 26 hours of notification (assumes 10 knot transit speed). The Coast Guard solicits comments on this approach.

The Committee recommended that the Coast Guard recognize the value of planning for rapid arrival of response resources to the scene. The tiers discussed above set maximum times for these arrivals. Thus, resources that are capable of arriving early are treated the same as those arriving just before the required maximum. The Coast Guard solicits comments on methods to recognize the early arrival of oil recovery devices and other response equipment when determining overall capability required to be planned for arrival on scene.

The Committee recommended more rapid response times in higher volume port areas, but did not identify specific ports. The higher volume port areas in the proposed rule were determined by the Coast Guard based on a study of persistent and non-persistent oil movement by vessels, tank ship and tank barge transits, and overall vessel transits in a port area. The Coast Guard's "Port Needs Study (Vessel Traffic Services Benefits)" published in March 1992 as required by section 4107 of OPA 90, and the 1987 and 1988 U.S. Army Corps of Engineers reports on "Waterborne Commerce of the United States" provided statistics for the 34 port areas evaluated. Analysis of this data indicated that 15 port areas had oil movements significantly greater than others. These port areas were determined using two methods: total oil volume (persistent and non-persistent) transported by water; and a weighted index with oil volumes and vessel traffic. The port areas were first ranked based on total oil volume. Figure 1 displays the results of this information. The second method listed the port areas using a relative weighting of persistent oil movement (50 percent); non-persistent oil movement (30 percent), tank ship and tank barge transits (10 percent), and overall vessel transits (10 percent). The volumes and transits were indexed to normalize the data for comparison between ports. The relative weightings were based on an assessment of the importance that each factor should have in the ranking of port areas. Figure 2 displays the results of this indexing. The port areas are listed in the same order as in Figure 1 for comparison. The decision to choose 15 port areas was based on the distinct break that occurs between the port areas at that point, both when listed by volume and by index. The higher volume port area to be used for response planning includes the area within 50 nautical miles seaward of the port entrance to reflect the increased probability of vessel casualties within port approaches. A report describing the methodology used for this determination is in the public docket indicated under "**ADDRESSES**."

BILLING CODE 4910-14-M

34 PORTS RELATIVE TO VOLUME OF PERSISTENT AND NON-PERSISTENT OIL



U. S. ARMY CORPS OF ENGINEERS 1987

FIGURE 1.

OIL MOVEMENT INDEX OF 34 PORTS IN ORDER OF TOTAL VOLUME

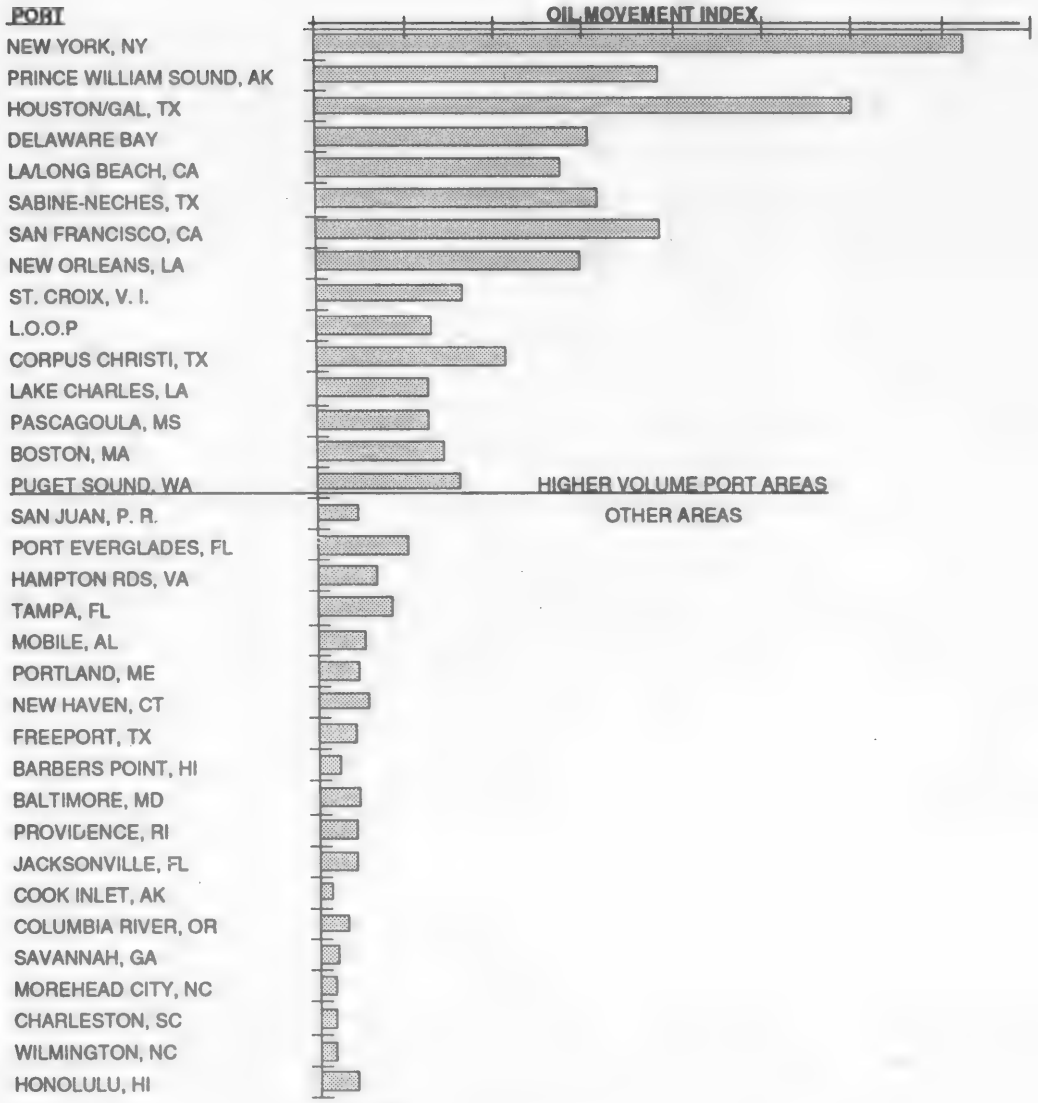


FIGURE 2.

BILLING CODE 4910-14-C

Although the Louisiana Offshore Oil Port (LOOP) was classified as a higher volume port area using this methodology, the Coast Guard has not included it in the list of higher volume port areas included in the proposed rule. The Negotiated Rulemaking Committee recommended that the reduced risk posed by deepwater ports be considered during development of this proposed rule. The Coast Guard agrees, thus LOOP was not included in the list of port areas subject to more stringent planning criteria.

Notification of Tier 1 resources must occur within 30 minutes of the discovery of a discharge, and such resources must be capable of being mobilized within a 2-hour period after notification. While all resources must be "capable" of being mobilized within that period, the plan can account for resources not needed in the initial stages of a response, such as temporary storage capacity. For example, a barge required to sustain on-water oil recovery operations after 8 hours need not be mobilized within 2 hours. These planning criteria apply only to the Tier 1 resources. Tier 2 and 3 resources must be mobilized as necessary to arrive on scene within the specified time. These times are not performance standards, rather they are planning criteria that must be considered when identifying resources.

The Committee recommended that the Coast Guard recognize the value of high rate response techniques such as dispersants and in situ burning, but did not provide a specific method or approach. The Coast Guard considered this recommendation when developing the requirement of the proposed rule that vessels carrying persistent oil as a primary cargo in offshore or open ocean areas identify and ensure the availability of, through contract or other approved means, dispersant resources. These must be appropriate for the type of oil carried by the vessel and be available in sufficient quantities to treat the volume of the vessel's largest cargo tank. Dispersant resources must be capable of arriving on scene within 24 hours of discovery of a discharge. The Coast Guard has included this requirement in the proposed rule because it believes that dispersants have a role in responding to a worst case discharge from a vessel. Limiting the requirement to vessels that carry only Group two or three persistent oils as their primary cargo and that operate beyond 12 miles from shore, and requiring these vessels to contract in advance, provides incentives for the expansion of dispersant capability in the United States. The Coast Guard solicits comments on the estimated costs of identifying dispersant capability.

This requirement is similar to those of the Minerals Management Service for outer continental shelf exploration and production activities under 30 CFR 250.42. The identification of resources required to use dispersant does not imply that their use will be approved during a spill response. The NCP provides specific procedures for the authorization of dispersants or other chemical countermeasures during a spill. Many areas have been identified by the Regional Response Team for the use of dispersants with approval from the Federal OSC under certain conditions.

Under certain circumstances, the dispersant capability may be used as credit against worst case discharge resource requirements. Appendix B to part 155 contains information on circumstances under which plan credit may occur..

The Committee considered salvage and firefighting capabilities, but did not make any recommendations. The Coast Guard considers these capabilities to be essential to deal with a worst case discharge. The proposed rule requires vessel owners or operators to identify and ensure the availability of, through contract or other approved means, both private salvage and firefighting capability for areas in which the vessel operates. It does not establish specific response times or equipment requirements. This requirement should ensure the availability of sufficient salvage and vessel firefighting capability in the United States. The Coast Guard intends that this proposed requirement create an incentive to maintain or expand existing capabilities. The Coast Guard solicits comments on whether specific levels of resources or capabilities should be identified, as well as the estimated costs of providing this capability.

The Committee recommended that the proposed rule require a vessel owner or operator to identify and ensure the availability of, through contract or other approved means, equipment necessary to perform vessel-to-vessel lightering. This includes equipment suitable for use with vessel systems as well as equipment that can be used when onboard systems fail or are damaged. The Committee considered recommending carriage of certain equipment, such as portable transfer pumps and hoses. However, the Committee's final recommendation allows this equipment to be stored off the vessel provided that it can be delivered on scene within specified time periods following notification. These time periods vary based on the waters in which the vessel operates. The list of equipment required to be identified covers items believed necessary to perform vessel-to-vessel transfers in an emergency. The vessel owner or operator is required to develop a lightering plan under proposed §§ 155.1035 and 155.1040, including a list of equipment required to carry out that plan. This section does not require that the specific amounts of equipment be identified. Rather the vessel owner or operator must identify the necessary capability that can be provided on scene within the times specified to implement their lightering plan. The Coast Guard solicits comments on whether specific quantities of equipment should be specified in the final rule

The proposed rule requires a vessel owner or operator to identify and ensure the availability of, through contract or other approved means, response resources available for shoreline protection activities as well as for shoreline cleanup. The Committee recognized that resources for these activities must be identified in advance, but made no specific recommendations to the Coast Guard on quantities, etc. Because the need for these resources are driven primarily by the type of shoreline area requiring protection or cleanup, the proposed rule requires a vessel owner or operator to identify and ensure the availability of, through contract or other approved means, a minimum quantity of these resources in advance.

Part of this minimum quantity of equipment is boom for shoreline protection. Table 2 of appendix B to part 155 lists the minimum quantities of boom that would be required based on the area in which a vessel operates. A vessel owner or operator would also be required to contract for sufficient support resources such as personnel, boats, anchoring equipment, etc. Table 2 is not based on vessel size because the equipment necessary to protect shoreline areas is generally the same regardless of the size of the vessel that may be the source of the discharge. Although an oil discharge from a larger vessel has the potential to affect more shoreline area than one from a smaller vessel, the purpose of this requirement is to ensure that there is a minimum quantity of equipment available for spills of any quantity. The Coast Guard solicits comments on the quantities of boom listed in Table 2 and whether this quantity should vary based on the size of the vessel.

The proposed rule also requires the owner or operator of a vessel that operates in river, inland, nearshore, and

offshore areas to identify and ensure the availability of, through contract or other approved means, response resources capable of carrying out shoreline cleanup operations. Vessels that operate in the open ocean (greater than 50 miles from shore) are not required to identify or contract for them in advance. This reflects the reduced likelihood that oil discharged from a vessel greater than 50 miles from shore will impact shorelines. Because the level of required resources cannot be quantified in advance, the Coast Guard proposes instead to use a qualitative evaluation based on a planning volume of oil that could reach the shoreline. This evaluation method takes into account the area in which a vessel operates and the type and volumes of oil carried as cargo. Table 3 of appendix B to part 155 includes factors to be considered for potential shoreline impact that are used in determining the planning volume. Appendix B to part 155 also describes how this planning volume is calculated. The Coast Guard solicits comments on alternative methods to evaluate the quantity of required shoreline cleanup capability.

The requirement to identify or contract for specified quantities of boom, support equipment, and shoreline cleanup capability that becomes effective in March 1993 serves as an interim requirement until March 1998. As noted, accurate identification of response resources required to perform shoreline protection or cleanup must be based on the area potentially affected. This information will be developed in the ACPs required by OPA 90. These area plans will not likely be in place in March 1993 when response plans must be submitted. In March 1998, the 5-year anniversary proposed for response plan resubmission will occur for many vessels. By this time, the ACP will be in place and will identify the response capability necessary to implement these geographic-specific response strategies. A vessel owner or operator is required to identify and ensure the availability of, through contract or other approved means, response resources necessary to provide the capability identified in the applicable ACP. Although the proposed rule indicates that this requirement must be met by March 1998, the Coast Guard solicits comments on whether inclusion of these area plan requirements should instead be required if they exist whenever a vessel owner or operator resubmits a plan after its initial approval.

As noted earlier, the Committee recognized that there should be a limit, or cap, to the resources that a vessel owner or operator must contract for in advance. The intent of contracting in advance is to ensure that adequate capability exists to respond to oil spills. In many areas of the country, adequate capability may not currently exist. Requiring contracts provides incentives for the private sector to expand capabilities in these areas. On the other hand, there are areas of the country, primarily the larger ports, where the total capability may exceed the proposed caps. It is not practicable to require vessel owners and operators to contract in advance with every response resource that exists in a given area. It must be recognized that these contracts ensure a baseline capability, but do not limit the resources that will be brought to bear during an actual oil discharge. Vessel owners or operators will be expected to activate the response resources necessary for the particular circumstances of the spill, regardless of what has been contracted for in advance.

Table 6 in appendix B to part 155 of the proposed rule lists the caps for 1993, 1998, and 2003. These caps are based on the effective daily recovery rate (as calculated using the procedure in appendix B to part 155) of response resources that must be identified in a response plan. They are based on an assessment of response capability that in the Coast Guard's opinion can be provided nationwide by 1993. Setting nationwide criteria as opposed to geographic-specific criteria provides an incentive to improve overall response capability in the United States. While some areas of the country may have capability that exceeds the caps, the 25 percent increase in these caps every 5 years will provide an incentive for those areas to expand capability. The 5-year interval is proposed to correspond with required resubmittal interval for response plans. The Coast Guard solicits comments on whether fixed dates should be established for this increase to be in place, or whether it should be tied to the date when an individual vessel owner must resubmit their plan after the effective date of the cap increase. The Coast Guard solicits comments on the specific caps proposed for 1993, 1998, and 2003.

As indicated, the caps would increase at 5-year intervals. The Committee recommended that the Coast Guard conduct an evaluation of these cap increases before they become effective to determine if they remain practicable. The Committee recommended taking into account advances in: skimming efficiencies and design technology; oil tracking technology; high rate response techniques; and other applicable response technologies. The Coast Guard agrees and would anticipate conducting such evaluations approximately 2 years before the cap increase would be effective. The increase would occur unless the Coast Guard determined that the increase was not practicable. Any change in the caps would occur through a public notice and comment process.

Section 155.1055 Training

This section of the proposed rule describes the training requirements that an owner or operator of a vessel carrying oil as a primary cargo or an unmanned tank barge must identify in their plan. The proposed rule does not require training in specific subjects or minimum training periods. Rather, it requires a vessel owner or operator to identify in their plan the training programs they will establish or adopt to train any persons with responsibilities in the response plan. The training will vary widely based on those responsibilities. For example, a vessel's master will need different training than the engineer responsible for internal cargo transfers, just as the qualified individual will need different training than the cleanup manager in the vessel owner or operator's shore-based spill management team. The Coast Guard solicits comments on whether there should be more specific requirements for training programs.

The proposed rule requires a vessel owner or operator to ensure that records of this training are maintained. Records on the vessel crew's training must be maintained aboard the vessel. Records for shore-based personnel trained must be maintained either by the qualified individual or, if applicable, by the spill management team identified in the plan to carry out some or all of the vessel owner's or operator's shore-based responsibility. This recognizes that a vessel owner or operator may rely on a private contractor or cooperative to meet their responsibilities. There is no need to maintain duplicate records. All records must be available for inspection by the Coast Guard.

The proposed rule also clearly indicates that a vessel owner or operator is not relieved from complying with applicable training standards issued by the U.S. Occupational Safety and Health Administration (OSHA). OSHA has issued regulations in 29 CFR 1910.120 that set minimum training requirements based on the task that a responder carries out. These requirements vary from 8 hours to 48 hours of classroom training, plus added requirements for field training. These requirements do not apply to the

vessel's crew, but would apply to shore-based personnel and should be taken into account in the training program of the vessel owner or operator.

Section 155.1060 Drills

The proposed rule requires that a vessel owner or operator identify a planned drill program in the response plan. This must include both announced and unannounced drills conducted by the vessel owner or operator as necessary to ensure that a response plan will function in an emergency.

The proposed rule specifies a minimum frequency for drills to be held for both the vessel's crew and for the shore-based personnel with responsibilities under the plan. The Coast Guard solicits comments on the frequency of these drills.

The proposed rule does not require drills to cover specific sections of a response plan. Instead, it allows the vessel owner or operator to tailor drills to exercise either components of a plan or an entire plan and to exercise those sections of the response plan that are most appropriate. A vessel owner or operator is required to conduct drills at least every 3 years to exercise the entire plan.

The proposed rule requires that any drills conducted to exercise the vessel's crew be documented in the vessel's log. Records of drills involving the shore-based spill management team or oil spill removal organizations identified in a plan must be maintained by the qualified individual.

The proposed rule also requires that vessel owners or operators participate in unannounced drills conducted by the COTP or Area Committee. Section 311(j)(7) of the FWPCA requires that the Coast Guard periodically conduct unannounced drills of removal capability in areas designated for development of Area Contingency Plans. The Coast Guard will involve vessels and facilities in these drills. These drills will be infrequent. A vessel owner or operator selected to participate in such a drill will be expected to activate the spill management team and oil spill removal organizations identified in the plan to the extent required by the COTP. The cost of activating these resources must be borne by the vessel owner or operator. The Coast Guard anticipates holding up to 12 such drills per year throughout the country. The probability of any one vessel being involved in a drill is low.

Finally, the proposed rule allows vessel owners or operators to take credit for drills in which their spill management team or identified oil spill response organization(s) participate for the areas in which the vessel operates. The Coast Guard recognizes that many vessel owners and operators will rely on the same response resources. There is no need for these resources to be exercised continually to meet the requirements of individual owners and operators. Documented drills involving identified response resources can be used to meet the requirements of this section. This would also apply to vessel owners of operators with multiple vessels. Participation in one drill held by a common spill management team will meet the requirement for all vessels utilizing that team.

Section 155.1065 Submission and Approval Procedures

This section of the proposed rule outlines the procedures for submission and approval of response plans. The vessel owner or operator is required to submit two English-language copies for review.

The Coast Guard is studying alternatives for plan review and approval. Consideration is being given to review at a central location for the initial submission of a plan. Since these regulations will result in the submission of more than 5,000 plans in February 1993, a centralized submission, review, and approval process during this phase will both facilitate review and ensure consistency. Geographic-specific appendices will be sent to the appropriate COTP for review and comment. After this initial submission, the system would be modified: plans for new vessels entering service would go directly to the COTP where the vessel's Certificate of Inspection is issued. Plans for foreign flag vessels would go either to a central location or to the COTP who issues the Tank Vessel Examination letter or Certificate of Compliance.

Vessel-specific information would be reviewed by a single Coast Guard office and the geographic-specific appendices would be reviewed by the appropriate COTP. COTPs will have the discretion to include members of the Area Committee in plan review if necessary. Area Committee involvement should be minimal, since appendices will contain primarily notification and response resource information.

Once a plan is approved, the Coast Guard will return one copy with an approval letter. Plan approvals will be valid for up to 5 years. Plans submitted before the required response resources are in place may receive conditional approval subject to availability of the required resources. The Coast Guard will retain one copy for use, if necessary, during a response involving the vessel.

If a plan is not approved, the Coast Guard will explain the deficiencies. The vessel owner or operator will have 30 days to submit a revised plan. The vessel may continue to handle, store, or transport oil as cargo during this period provided that the certification of the availability of the required response resources remains valid.

Copies of an approved response plan must be maintained aboard the vessel, by the qualified individual, and by the vessel owner or operator.

Section 155.1070 Plan Revision and Amendment Procedures

This section of the proposed rule requires that vessel response plans be reviewed annually by the vessel owner or operator to ensure that plan information is current. A letter documenting this review must be submitted to the Coast Guard.

Changes in vessel operations require plan resubmission for approval. These include: addition of an operating area not previously covered by the vessel's plan; a change in the vessel's configuration that significantly affects the plan information, such as a reconstruction or major tank or piping reconfiguration; a change in the type of oil carried as cargo (differing cargo groups have different resource requirements); a change in the identity or capability of the response resources, identified and ensured available by contract or other approved means, that affects their availability; a change in the vessels emergency response procedures; other changes that significantly affect plan implementation. If no other revisions occur, plans must be submitted for reapproval within 5 years of the previous approval.

Plan revisions that affect only names or phone numbers do not require resubmission for approval. However, all plan holders, including the Coast Guard, must receive such revisions as they occur.

Vessel owners or operators must revise a plan whenever the Coast Guard determines that it does not meet the requirements of this subpart. Vessel owners or operators will receive a written notice of deficiencies requiring revision. Deficiencies in the identification of a qualified individual or required response resources must be corrected within 3 days. All other deficiencies must be corrected within 30 days. Vessels may continue to handle, store, or transport oil during the relevant period.

The proposed rule provides appeal procedures for a vessel owner who disputes a plan's deficiency. These

procedures are similar to those under other Coast Guard regulations.

Subpart E—Additional Response Plan Requirements for Certain Vessels Operating in Prince William Sound, Alaska

Section 155.1110 Purpose and Applicability

The proposed requirements of this subpart provides a greater level of preparedness above and beyond the requirements of proposed subpart D. These additional requirements will ensure that adequate response equipment is rapidly on scene in the event of a future oil spill, and that the residents in Prince William Sound are appropriately trained in oil spill removal and containment techniques.

This subpart provides requirements and criteria for use in response plan development and in identifying response resources. The requirements are not intended to establish performance standards to be met during an oil spill. These requirements are in addition to the ones found in proposed subpart D of 33 CFR part 155.

Section 155.1125 Additional Response Plan Requirements

This section describes what must be included in the geographic-specific response plan appendix for Prince William Sound. The appendix is required to identify: The oil spill removal organization; drill procedures for the required response resources; procedures for testing and certifying of response equipment; and type and location of prepositioned equipment. The oil spill removal organization will consist of trained personnel capable of responding to a worst case discharge, to the maximum extent practicable.

The oil spill removal organization must identify personnel to be trained in the communities and hatcheries specified in the rule. General training is to be provided in oil spill removal and containment techniques and specific training is required for the individual response resources provided. The training will allow local residents to assist in the cleanup and containment of oil spills and provide a means of protecting their property and economic interests.

The oil spill removal organization must evaluate each of the communities and hatcheries listed in § 155.1125 to determine the personnel necessary to be trained as well as the property and sensitive areas requiring protection. Response strategies and assumptions then need to be developed. These strategies need to reflect the practicable limitations of personnel and response equipment available.

The majority of the vessels that carry non-crude oil products are small tank barges. These barges typically carry between 30,000 to 70,000 barrels of products. It would appear economically infeasible for these vessels to establish an oil spill removal organization capable of responding to a 200,000 barrel spill, an amount much greater than the vessel's cargo capacity. The language in the statue is clear: Response plans for all tank vessels operating on Prince William Sound shall provide for the establishment of an oil spill removal organization consisting of trained personnel to immediately remove, to the maximum extent practicable, a worst case discharge or a discharge of 200,000 barrels of oil, whichever is greater. The statute does not allow for the Coast Guard to set lower limits for vessels with a capacity less than 200,000 barrels. The proposed rule reflects the requirements of the statute. It is also clear that providing for this response organization will severely increase transportation costs to the consumer. One way that these vessels could satisfy this requirement without incurring major costs would be to join the existing oil spill removal organization. The Coast Guard solicits comments on the feasibility of this alternative and associated costs and on our interpretation of the statutory requirements.

The term "immediately remove" is used in OPA 90 to assess the number of trained personnel needed by an oil spill removal organization to respond to a worst case discharge or a discharge of 200,000 barrels, whichever is greater, to the maximum extent practicable. The Coast Guard considers the phrases "to the maximum extent practicable" and "immediately remove" to be incompatible in the sense that a worst case discharge can rarely be immediately removed because of the maximum practicable limitations in present day cleanup technology and the limited number of residents available to respond to an oil spill in Prince William Sound. Immediately is not used in this proposed subpart to describe the number of trained personnel needed by an oil spill removal organization. Coast Guard believes that the time table proposed, given the nature of the area and the resources available, is an appropriate implementation of "immediately."

The drills required by this proposed subpart are in addition to the proposed requirements of subpart D. The two required drills are to ensure that the oil spill removal organization and the additional equipment and personnel required by this proposed subpart remain in a state of readiness to respond adequately to a worst case discharge to the maximum extent practicable. The Coast Guard does not intend that each individual vessel be individually exercised. These drill requirements can be met by a consortium of vessel owners or operators or by an oil spill removal organization. The drills must include the participation of one or more vessels subject to this subpart to ensure a realistic exercise.

Certification of prepositioned equipment is the responsibility of vessel owners. The method for periodic certification of equipment required by OPA 90 has yet to be determined. The Coast Guard is considering the use of an independent entity to perform this function. The Coast Guard solicits comments on this approach.

Section 155.1130 Requirements for Prepositioned Response Plan Equipment

This section of the proposed rule requires response resources in addition to the requirements proposed in §§ 155.1035, 155.1040, and 155.1045. This section established an additional planning tier for Prince William Sound. This additional tier requires prepositioned on-water recovery equipment and storage capacity to be on scene within 6 hours for all vessels carrying crude oil and for non-crude oil carriers greater than 15,000 deadweight tons (DWT). This section also reduces response times proposed in § 155.1050. The additional tier for certain vessels and the reduced response time for the on-water recovery equipment provide for an effective recovery capacity of up to 70,000 barrels/day to be on scene within 36 hours. The 70,000 barrel/day response capacity provides the additional capability required by section 5005 of OPA 90.

Non-crude oil traffic in Prince William Sound consists mostly of small tank barges and tankers. The tankers are presently only loading and discharging at Whittier, Alaska: tank barges are serving the various communities, military sites, and hatcheries located around Prince William Sound. The supplemental on-water recovery and storage capabilities for these vessels reflects the high volatility of their cargo. Much of the spilled oil from a non-crude oil carrier will evaporate or disperse soon after a discharge. Recovery operations are likely to proceed more cautiously due to the higher flammability of the cargo. This required equipment must be prepositioned along the vessel's intended route of operation.

Vessels less than 15,000 DWT will have to provide the response resources required by §§ 155.1035, 155.1040, or 155.1045. The reduced response times for this equipment reflects the statutory mandate of section 5005 of OPA 90 to provide more rapid response capability. However, it is not necessary to provide an additional tier or response equipment due to the type of cargo carried and the costs of providing and maintaining this equipment. The equipment required by §§ 155.1035, 155.1040, and 155.1045 will be sufficient to meet the intent of section 5005 of OPA 90.

The additional response equipment for communities and hatcheries identified in proposed § 155.1125 will enhance the ability of the local residents to contain and remove oil and to protect their property. The prepositioning of equipment improves the effectiveness of a cleanup operation. The requirement for permanent buoys at strategic locations will provide midchannel anchor points for protective booming of property and environmentally sensitive areas. Prepositioned equipment resources allows for a more rapid response.

Section 5005(a)(1) and 4116(c) of OPA 90 both address requirements for escort vessels. Section 5005(a)(1) requires that response plans for all vessels to which this subpart applies to provide for escort vessels with skimming capability. This includes all non-crude oil carrying vessels. Escort vessels with skimming capability are considered dedicated response vessels as defined in proposed § 155.1015. Section 4116(c), "Escorts for Certain Tankers," requires at least two towing vessels to escort all single hulled tankers over 5,000 gross tons transporting oil in bulk in Prince William Sound.

When section 5005 (a)(1) is read in conjunction with 4116(c) it appears that two escort vessels with skimming capability are required. Costs associated with providing escort vessels with skimming capabilities would likely be prohibitive for the small fleet of vessels operating in Price William Sound carrying non-crude oil products.

It is also unclear whether the escort vessels required by section 5005 should only provide skimming capability or also the capability of the towing assistance.

The Coast Guard solicits comments on the following issues: Whether all vessels carrying oil in bulk as cargo should be escorted by vessels with skimming capability; the number of escort vessels required for each vessel; the feasibility of requiring skimming capabilities for each of the required escort vessels; and the necessity of requiring an escort vessel to provide towing capabilities.

Section 155.1135 Response Plan Development and Evaluation Criteria

This section of the proposed rule provides response times for the response resources required by §§ 155.1035, 155.1040, and 155.1045. More rapid response times reflect the statutory requirements of section 5005 of OPA 90. In accordance with these response times, a vessel owner or operator of a large crude oil carrier that exceeds the response capability caps in proposed § 155.1050, is required to plan for 70,000 barrels/day of on-water recovery capability to be on scene within 36 hours. In any other port in the United States, the planning requirement would be effective recovery capacity of up to 40,000 barrels/day to arrive on scene within 60 hours in a higher volume port area, and within 72 hours in all other areas.

The same applies to vessels carrying non-crude oil products. Response times have been reduced and/or additional response resources have been required, so that spilled oil will be removed from the environment more rapidly.

Section 155.1140 Special Consideration for Vessels Contracting With a Facility Permitted Under the Trans-Alaska Pipeline Authorization Act

This section of the proposed rule allows the owner or operator of a vessel to contract with a facility authorized under the Trans-Alaska Pipeline Authorization Act to meet some or all of the requirements of this subpart. This provision has been provided to reflect the present arrangement that crude oil carriers have with the Alyeska Pipeline Service Company. The COTP will review the vessel's geographic-specific appendix for Prince William Sound to ensure that any contractual arrangements meet the requirements of this subpart. The owner or operator of a vessel that has entered into a contractual relationship to provide response resources is not absolved from their responsibility to meet the requirements of this subpart.

Appendix B to Part 155—Guidelines for Determining and Evaluating Required Response Resources for Vessel Response Plans.

This appendix contains the procedure for a vessel's owner or operator to determine the response resources that must be identified and ensured available, by contract or other approved means. The procedures are based on the general recommendations of the Negotiated Rulemaking Committee for determining resources necessary to respond to the average most probable discharge, maximum most probable discharge, and worst case discharge to the maximum extent practicable. The specific approach and proposed factors were discussed by the Committee, but were not part of the final Committee recommendation except as noted.

The procedures described in the appendix are used to determine the planning volumes that a vessel owner or operator must use for response resource identification. A number of assumptions are used to determine this volume. This appendix does not establish a performance standard.

The procedures used for these calculations are based on the vessel's operating area and type of oil (persistent or non-persistent) carried. Non-petroleum oils would be classified using the applicable persistent or non-persistent oil cargo group. The Coast Guard solicits comments on this classification for non-petroleum oils.

The appendix describes the procedures to determine: Whether equipment identified in a response plan is acceptable to meet the requirements of this proposed rule; resource requirements to plan for the average most probable discharge; resource requirements to plan for the maximum most probable discharge; resource requirements to plan for the worst case discharge; effective daily recovery rates for oil recovery devices; the calculation of the worst case discharge planning volume; availability of high-rate response methods; and additional equipment necessary to sustain response operations. Each of these procedures provides further detail on the requirements in § 155.1050. The Coast Guard solicits comments on these procedures.

The proposed method for evaluating the effective daily recovery rate for an oil recovery device was recommended by the Committee. While the Committee recognized that actual recovery rates were affected by a number of variables, the proposed approach allows for the use of either of two methods to determine the rating of equipment identified to meet the planning capabilities required by this proposed rule. The differentiation between rope and belt-type devices and other designs was not part of the Committee recommendation, but was added by the Coast Guard to reflect the difference in these devices from others when determining recovery rates.

The appendix includes tables providing the factors necessary to determine the resource requirements. Table 1 lists the operating criteria for oil recovery devices and booms. It uses

significant wave height for classifying equipment identified in a response plan. Such equipment must be designed to function in the conditions listed for the applicable operating environment. During plan evaluation, the Coast Guard will assess whether equipment identified in a plan meets these criteria.

Table 2 lists the amount of boom that must be contracted for or identified by vessel owners or operators and the response time requirements for shoreline protection. The requirement is based on the area in which the vessel operates, not the size of the vessel. All boom must meet the applicable design criteria in Table 1. The Coast Guard solicits comments on this approach.

Table 3 provides factors needed to calculate the planning volumes for response resource identification. The table is divided into four geographic areas and four oil types. Because loss to the environment, potential for shoreline impact, and potential for on water recovery varies by the oil type and location, a factor is included for each. The factors are based on estimates of the oil behavior when it enters the environment: A percentage will be lost due to natural dispersion; a percentage will reach the shoreline; and a percentage that will remain for on water recovery. In the inland/nearshore and offshore portions of the table, the percentages do not add up to 100 percent. This reflects an adjustment in the on water percentage to increase the quantity of resources that are planned for mobilization within the first 3 days of the response. Because the oil may rapidly impact the shoreline in these areas, quick mobilization is essential. The table also includes a sustainability period. This was used to calculate the resource mobilization factors in Table 5. It does not reflect how long it will take to complete a clean-up. During an actual response, vessel owners and operators will be required to sustain the clean-up operation until release by the Federal OSC. The Coast Guard solicits comments on the specific factors in this table.

Table 4 lists emulsification factors for the four oil groups. The factors represent the increase in volume expected due to emulsification. This increase must be considered when planning for response resources, oil storage and disposal capacity, etc. Oil emulsification affects both the weathering rate and the volume of oily material that must be planned for during the recovery operations. The tendency for certain oils to form an emulsion is based primarily on its viscosity at the ambient temperature and its chemical composition. Because this varies widely, the table uses cargo groups based on specific gravity. Some oils form very stable emulsions: Others emulsify then naturally separate. The individual factors reflect the general behavior of oils in a given group, and do not reflect any one particular oil. The Coast Guard solicits comments on the factors proposed, as well whether there is an alternative method for determining these factors.

Table 5 lists the response resource mobilization factors for the geographic areas where response planning is required. These factors reflect the tiering of on water oil recovery capacity that must be mobilized within the first 3 days of an incident to maximize the potential for oil recovery. These factors were derived using the sustainability periods in Table 3 for the respective geographic area. Each factor reflects a percentage of the total on water recovery requirement. To recover the oil planned for on water recovery within the sustainability period, this capacity must be on scene within the time specified for the applicable tier.

Table 6 lists the proposed caps on response resources that vessel owners or operators must identify and ensure available, through contract or other approved means. The cap reflects an estimate of capability that is considered a practical nationwide target to be met in 1993. Providing the resources necessary to meet these caps will require a significant expansion of response capabilities in most areas of the country. Some areas may currently have resources in place or planned that will exceed these caps. The caps serve as a minimum capability that must be available throughout the United States. The cap for rivers is lower to reflect both the smaller size vessels moving in river areas and a practical limit on response capability available in those areas in 1993.

The caps listed in Table 6 increase 25 percent every 5 years to create incentives for both an increase in the quantity of equipment available and improvements in spill response technology. The Coast Guard solicits comments on the effective daily recovery rates that have been proposed as nationwide minimums.

Regulatory Evaluation

Executive Order 12292 (46 FR 13197, February 19, 1981) requires that agencies develop a regulatory analysis for any rule having major economic consequences on the national economy, individual industries, geographic regions, or levels of government. To assist with making this determination, a series of questions was asked in the ANPRM to solicit information from the public on the potential economic impact of these regulations.

The Coast Guard considers these proposed regulations to be major under Executive Order 12291. It is a significant rule using a number of criteria under the Department of Transportation Regulatory Policies and Procedures (44 FR 11020; February 26, 1979). This rulemaking will cost the oil transportation industry and the general public more than $100 million annually. It may also affect domestic and international shipments of oil to and from the United States and may generate substantial public interest and controversy. These regulations will also impact cleanup contractors, oil spill cooperatives, and other not-for-profit cleanup organizations.

The proposed rule contains requirements for vessel response plans, as well as additional requirements for certain vessels operating in Prince William Sound, Alaska. The impact of these requirements has been analyzed separately and is summarized below.

A draft Regulatory Impact Analysis (RIA) for vessel response plans, and a draft Regulatory Evaluation (RE) for Prince William Sound are available in the docket for inspection or copying, as indicated under "ADDRESSES." It also has been placed in a separate document (CGD 90–051A) established to facilitate review of the programmatic RIA for titles IV and V of OPA 90. Any public comments received on the RIA will also be placed in that docket.

Vessel Response Plans

In performing the regulatory impact analysis, the following four response plan alternatives were considered:

(1) No requirements,

(2) Comprehensive requirements for all vessels,

(3) Reduced requirements for vessels carrying oil as a secondary cargo, and

(4) Reduced requirements for inland barges only.

Industry Profile

The vessels that are subject to these requirements are divided into four distinct groupings: (1) Oil tankships in international trade, (2) coastal trading U.S. tankships and tank barges, (3) inland tank barges, and (4) other vessels not certificated under 46 CFR subchapter D, which carry oil in bulk as a secondary cargo. Three distinct industry groups comprise the majority of these other vessels. They are oil field supply vessels, fishing vessels and towing vessels.

Approximately 363 companies owning 1,050 vessels constitute the international tankship sector. The number of vessels held by any one company varies from 1 to over 50 vessels. The assets of the publicly held tankship operating firms vary from $28 million to $95 billion.

The coastal fleet consists of U.S. owned tankships and coastal trading tank barges. The coastal fleet is comprised of 147 tankships owned by 28 companies and 190 tank barges owned by 52 companies. The number of vessels owned by any one company varies from 1 to over 10 vessels. The assets of the independent, publicly-held companies engaged in operating the coastal fleet vary from $50 million to over $1 billion.

The inland barge fleet is comprised of 409 companies with 3,461 active barges. Of these, 219 companies own only 1 vessel or 6 percent of the fleet. The assets of publicly traded firms in this industry vary from $23 million to $13 billion.

The oil field supply vessel industry constitutes the largest group of vessels that carry oil as a secondary cargo covered by this proposed rule. The number of these vessels covered by this proposed rule is estimated to exceed 1,000. The number of these vessels owned by any one company varies from 1 to over 50.

The fishing vessel industry consists of 5,422 vessels owned by 4,587 companies. In addition, 22,371 documented fishing vessels are owned by individuals. The vast majority of these are owners or operators of one vessel. Approximately 80 to 100 of these vessels or 0.4 percent will potentially be impacted by this regulation because they carry oil as a secondary cargo. Virtually all of these vessels are privately owned.

The towing vessel industry consists of 5,703 vessels owned by 2,156 companies. Of these, two companies own over 50 vessels while 1,357 owners have only one vessel. Approximately 2.5 percent of the fleet or 150 vessels are engaged in the transfer oil to other vessels. This proposed rule would not be applicable to the majority of these vessels because the oil carried would not be considered cargo due to the nature of their operation.

Costs

In the aggregate, the requirement for vessel response plans will result in substantial costs to the industries affected. The present value cost of this regulation for the period 1992 through 2015 is estimated at $1.277 billion. The bulk of this cost entails large capital and operating expenditures to ensure adequate shore-based response capability. This accounts for 86 percent of the total incremental cost, or $1.123 billion. The next most costly items are drills and training with costs of $122 million for the 24-year period examined, or 10 percent of the total cost. The incremental cost of the entire regulation is $187 million for 1992, but declines to $155 million annually for the period 1995 through 2015.

For individual tankship or coastal trading tank barge owners or operators, the cost of compliance will vary widely. The owners or operators of large fleets can spread the costs of the response plan development over many vessels. The annual cost per vessel to major oil companies is estimated to be $3,400 per vessel. The cost to small independent vessels owners or operators is estimated to be $26,000–$36,800 per vessel.

For individual inland tank barge owners or operators, the cost per tank barge will also vary widely according to the number of barges owned. For companies with more than 100 barges, the annual cost is estimated to be approximately $75 per barge annually for the development of the plan, plus $825 per barge annually for the development and maintenance of inland response capability ($2 million per year divided by 2,424 inland barges), for a total of $900 per barge per year. By contrast, the cost for companies with 1 to 9 barges is estimated between $195 and $1,750 for the development of the plan, plus $825 for the contractor retainer per barge per year.

The costs for oil field supply vessel, fishing vessel, and towing vessel owners or operators are estimated to be as high as $1,000 per year. As with other vessels, there would be economies of scale for owners or operators of multiple vessels.

The Coast Guard is particularly interested in comments about its estimates of the costs and the effectiveness of the measures mandated by this part of the rule. Are there concerns that the Coast Guard has either underestimated or overestimated the costs of specific provisions of the rule? If so, what steps could be taken to strengthen the analysis which supports these estimates? Are there any additional data not considered by this analysis that would shed light on the cost-effectiveness of the proposed requirements compared with alternative requirements not proposed? Will these provisions place an undue hardship on small entities? Given the relatively higher costs which will be borne by smaller firms, is there any evidence that regulating them will yield higher benefits than regulating larger firms? The Coast Guard solicits comments on these questions and on the cost estimates and will consider all comments in preparing the final rule, to the maximum extent allowed by law.

Summary of Benefits

The principal benefit of the vessel response plan requirement is a potential reduction in oil spilled with a corresponding reduction in natural resource damages and cleanup costs. Vessel response plans are expected to influence: The frequency of and spill occurrence; oil outflow volumes when an incident occurs; spill preparedness; and response management. The requirements of the proposed rule should improve spill response such as: Improved notification and communications; quicker mobilization and reduced response times; and clearer procedures and guidelines for onboard transfers, lightering, and towing. The potential benefits of vessel response plans were calculated by conducting detailed analyses of historical cases and by assessing the effectiveness they might have had in reducing outflows, cleanup costs, and damages.

To quantify benefits of avoided natural resource damages associated with the vessel response plan regulations and to justify the investment in oil spill abatement, the ideal methodology would be to conduct a multiple case study of historical spill data that included natural resource damage assessments. The results would represent the range of benefits from avoided natural resource damages. This could not be done due to the limited number of claims actually settled since OPA 90 established a clear statutory basis for national resource damage restoration claims and the lack of standardized models to perform damage assessments.

Present models provide a glimpse of potential benefit ranges associated with the reduction of oil spilled in the marine environment. Other models and methodologies, which may better quantify natural resource damage, are under development. The monetary value of natural resource damages avoided was calculated based on historical spill unit values. The RIA estimates that vessel response plans will lead to an average 15 percent reduction in total costs of clean-up, third-party claims, and natural resource damage.

Additional Response Plans Requirements for Certain Vessels Operating in Prince William Sound, Alaska Industry Profile

Vessel traffic in Prince William Sound is dominated by large crude carriers calling at the Trans-Alaska Pipeline

(TAPS) terminal near Valdez, Alaska. The terminal is operated by the Alyeska Pipeline Service Company, a consortium of seven major oil companies. This trade consists of approximately 900 tanker loadings accounting for approximately 700 million barrels annually. The non-TAPS traffic consists of product movements by ocean barges and relatively small, single hulled tankships. The latter are operated under charter to the Military Sealift Command and typically call at Whittier, Alaska 4 to 6 times a year. The remainder of the trade involves barge movements of small amounts of home heating oil and marine diesel fuel. A small refinery will be opening in Valdez in late 1992 requiring the loading of a product barge weekly. Total non-TAPS traffic, including the new refinery, will be 2.5 million barrels annually.

Costs

Overall industry costs of complying with section 5005 of OPA 90 requirements are estimated to be $286 million over the 10-year period, 1993 through 2002. Of this, $232 million would be borne by vessels calling at the TAPS terminals and $54 million by non-TAPS vessels. Presently, approximately 900 tanker loadings of nearly 700 million barrels of crude oil are transported from the TAPS terminal annually. This is expected to decline at a rate of 6 to 7 percent a year. Currently the non-TAPS trade consists of 30–35 port calls a year. This will increase by approximately one barge a week when the refinery in Valdez becomes operational. The cost per port call is estimated at $64,000 for tankers involved in TAPS trade and $53,000 per vessel in non-TAPS trade. Unit costs per barrel are estimated at 6¢ per barrel for TAPS trade crude and $2.16 per barrel for non-TAPS trade product.

The Coast Guard is particularly interested in comments about its estimates of the costs and the effectiveness of the measures mandated by this part of the rule. Are there concerns that the Coast Guard has either underestimated or overestimated the costs of these provisions of the rule? If so, what steps could be taken to strengthen the analysis which supports these estimates?

Summary of Benefits

OPA 90 places additional requirements on the spill response capability of certain vessels operating in Prince William Sound. These added requirements are intended to provide additional response capability to protect this unique environmentally sensitive area. Specifically, section 5005 of OPA 90 requires: Prepositioned response equipment; establishment of oil spill removal organizations; training of local citizens and fish hatchery employees in oil spill removal techniques; periodic testing and certification of equipment; and exercises to test the capability of the equipment and trained personnel.

Prepositioned equipment, training, drills, and escort vessels improve the efficiency of offensive response operations. Quick recovery of oil from the environment reduces the net impact of the spill. The regulations for Prince William Sound are estimated to increase the volume of recovered oil by 15 percent for crude oil, and 10 percent for non-persistent oils.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), the Coast Guard must consider whether this proposal will have a significant economic impact on a substantial number of small entities. "Small entities" include independently owned and operated small businesses that are not dominant in their field and that otherwise qualify as "small business concerns" under section 3 of the Small Business Act (15 U.S.C. 632).

An Initial Regulatory Flexibility Analysis discussing the impact of this proposal on small entities is available in the docket for inspection or copying where indicated under **ADDRESSES.**

Vessel Response Plans

The impact of vessel response plan requirements will be distributed differently across various sectors of the U.S. waterborne oil transportation industry. Some small owners or operators of international flag tankers, which call infrequently in U.S. waters, may choose to discontinue U.S. trade. However, they will be able to use their vessels in other trades.

Small operators of coastal tankers and tank barges will incur a minor competitive disadvantage versus larger operators. The requirement for a response plan, by itself, should not force these companies to exit the business. However, this proposed regulation may have a detrimental impact on small barge operators. The combined effects of the requirements of the OPA 90 may force a number of these companies to sell their vessels for subcontract due to the cost of meeting all OPA 90 requirements.

Fishing vessels, towing vessels, and oil field supply vessels that carry oil in bulk as a secondary cargo could also be adversely impacted by this regulation. For example, if the annual cost of compliance for an oil field supply vessel is $1,000 for a response plan, it is estimated the cost per gallon of oil carried is between 2/100¢ and 4/100¢ per gallon. The cost for a 90,000 DWT ton tanker is only 3/1000¢ per gallon, a lower cost. For towing vessels and fishing vessels, the cost per gallon of oil carried as cargo is estimated to be 38¢ and $1.00 respectively. The impact of this rule on vessels that occasionally carry oil in bulk as a secondary cargo will be significantly disproportionate. The proposed rule subjects these vessels to reduced requirements in accordance with the recommendations of the Negotiated Rulemaking Committee. It is estimated that the costs to meet these reduced response plan requirements for secondary carriers is 10 percent of the cost to meet the comprehensive standards if that was required.

Additional Response Plan Requirements for Certain Vessels Operating in Prince William Sound, Alaska

The increase in the unit cost of transporting crude petroleum to comply with section 5005 of OPA 90 is relatively minor. This can easily be absorbed by the large oil companies transporting TAPS oil. For the products transported in the non-TAPS trade, the unit cost will be considerably higher. Vessels operated under charter to the Military Sealift Command are not considered a small entities. Only one small entity was identified in the non-TAPS trade.

Collection of Information

Under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget (OMB) reviews each proposed regulation that contains collection of information requirements to determine whether the practical value of the information is worth the burden imposed by its collection. Collection of information requirements include reporting, recordkeeping, notification, and other similar requirements. The collection of information requirements for each subpart of the proposed rule are discussed separately.

Subpart D Vessel Response Plans

This proposal contains collections of information requirements in the following sections: §§ 155.1025 (Operating restrictions and interim operating requirements); 155.1045 (Requirements for vessels carrying oil as secondary cargo); 155.1055 (Training); 155.1060 (Drills); 155.1065 (Submission and approval procedures); and 155.1070 (Plan revision and amendment procedures).

The reporting and recordkeeping requirements associated with this proposed rule are being submitted to

OMB for approval in accordance with 44 U.S.C. chapter 35. The following particulars apply:

DOT No: 2115; OMB CONTROL NO XXXX.

Administration: U.S. Coast Guard.

Title: Vessel Response Plans.

Need for Information: This information is necessary to ensure that vessels carrying oil in bulk as cargo entering U.S. waters are adequately prepared to respond to an oil spill.

Proposed Use: The purpose of the OPA 90 amendments to section 311 of the FWPCA was to reduce the number of oil spills and to minimize the impact of the oil spills when they do occur in U.S. waters. Without the proposed requirements for vessel response plans, it is probable that some operators will not maintain the necessary internal resources (effective planning, training, drilling, etc.) or external resources (adequate shore-based response capability) to meet the requirements of these amendments. The proposed collection of information requirements help ensure and monitor, through the submission and recurring update of response plans, that vessels entering U.S. waters have appropriate response plans and shore-based resources.

Submission of vessel response plans to the U.S. Coast Guard for approval, the onboard verification of an approved plan during routine boarding procedures, and the maintenance of training and drill records is believed to be the most efficacious way to ensure compliance.

Frequency: Response plan submitted every 5 years; notice of reviews completed annually; updates as necessary.

Burden Estimate: A one-time burden for industry of 288,400 hours for reporting and an annual recordkeeping burden of 82,500 hours.

Respondents: 902.

Average Burden Hours per Respondent: One-time reporting burden of 319.73 hours and an annual recordkeeping burden of 91.52 hours.

Subpart E Additional Requirements for Certain Vessels Operating in Prince William Sound, Alaska

This proposal contains collection of information requirements in the following section: §§ 155.1125 (Additional response plan requirements); and 155.1130 (Requirements for prepositioned response plan equipment).

The reporting and recordkeeping requirements associated with this rule are being submitted to OMB for approval in accordance with 44 U.S.C. chapter 35. The following particulars apply:

DOT No: 2115; OMB CONTROL NO XXXX.

Administration: U.S. Coast Guard.

Title: Additional Response Plan Requirements for Certain Vessels Operating in Prince William Sound, Alaska.

Need for Information: This proposed rule ensures that a vessel owner or operator will provide a geographic-specific response plan appendix that addresses: Prepositioned oil spill containment and removal equipment; oil spill removal organizations; training of local residents in oil spill containment and removal techniques; drills; and periodic testing and certification of equipment.

Proposed Use: The purpose the OPA 90 is to reduce the number of oil spills in U.S. waters and minimize the impact when they do occur. The additional requirements in section 5005 of OPA 90 for trained personnel and prepositioned response equipment reflect the particular environmental sensitivity of Prince William Sound. Without the proposed requirements for vessels carrying oil in bulk as cargo that operate in Prince William Sound, it is unlikely that sufficient response resources would be available or properly maintained to clean up a spill. The proposed requirement establishes oil and spill removal organizations and require prepositioned response equipment to ensure a greater level of preparedness and rapid response in the event of a spill.

Frequency: Records of personnel training and equipment maintenance, inspection, and testing would be maintained as necessary. Training and drill plans would be submitted yearly. Drills would take place twice a year.

Burden Estimate: 1480 hours a year for reporting and 400 hours a year for recordkeeping.

Respondents: 2.

Average Burden Hours per Respondent: 740 hours reporting and 200 hours of recordkeeping per year.

The Coast Guard has submitted the requirements to OMB for review, as required by the Paperwork Reduction Act. Persons commenting on the collection of information requirements should submit their comment both to OMB and to the Coast Guard, as indicated under **ADDRESSES.**

Federalism

The Coast Guard has analyzed this proposal in accordance with the principles and criteria contained in Executive Order 12612 (October 26, 1987), and has determined that this proposal does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

During the discussions of the Negotiated Rulemaking Committee, several States expressed concern about the issue of preemption. Some States, including Alaska, Washington, and Florida, have already issued regulations requiring oil spill response plans for vessels. The Coast Guard has evaluated the federalism issue in light of the statutory requirement for vessel response plans and the accompanying provision which dictates that State law shall not be preempted. These regulations establish minimum requirements which may be supplemented by the States. However, a State may not adopt regulations inconsistent with Federal regulations. State law would be preempted by these regulations only to the extent that compliance with the State law would preclude owners or operators of vessels from complying with these requirements.

Section 311(o)(2) of the FWPCA explicitly preserves the authority of any State to impose its own requirements or standards with respect to the liability of persons involved in the removal of oil. Further, section 311(o)(3) of the FWPCA indicates that nothing in section 311 shall affect any State or local law not in conflict with anything therein.

The Supreme Court has held that a state may not issue a regulation which actually conflicts with a Federal statute or regulation. A conflict will be found "where compliance with Federal and State regulations is a physical impossibility." *Florida Lime and Avocado Growers* v. *Paul, 373 U.S. 132.*

Impossibility of compliance must be distinguished from inconsistency in Federal and State laws. For example, if a Federal regulation indicates several ways in which a requirement may be satisfied, a State may limit, but not preclude the method of compliance in its regulations.

Executive Order 12612 and sections 311(o) (2) and (3) of the FWPCA emphasize the goal of preserving the authority of the States in pollution prevention and response. In *Askew* v. *American Waterways Operators, Inc.*, 93 S.Ct. 1590 (1973), the Supreme Court stated that "sea-to-shore pollution [is] historically within the reach of the police power of the States." (Id at 1601.) Hence, the Court has clearly preserved the authority of the States to regulate in this area, as long as State law is not in direct conflict with Federal law.

Section 311(j)(5) of the FWPCA specifically directs the President to issue these regulations. It is certified that the policies contained herein have been

assessed in light of the principles of the Federalism Executive Order. Because this proposal is being issued in response to a statutory mandate, the Coast Guard has determined that this action accords fully with the Executive Order.

Environment

The Coast Guard has prepared a preliminary Environmental Assessment (EA) for this action in accordance with the Council on Environmental Quality regulations (40 CFR parts 1500–1508) and Coast Guard policy (COMDTINST M16475.1B) implementing the procedural provisions of the National Environmental Policy Act (NEPA). The EA discusses the environmental consequences of the proposed action and alternatives, including the no-action alternative. The preliminary EA is available in the public docket as noted under "ADDRESSES." After receipt of all comments to this NPRM and the EA, the Coast Guard will make a final decision on the need to draft an Environmental Impact Statement (EIS) for this rulemaking.

List of Subjects in 33 CFR Part 155

Oil pollution, Hazardous substances, Reporting and recordkeeping requirements, Incorporation by reference.

For the reasons discussed in the preamble, the U.S. Coast Guard proposes to amend 33 CFR part 155 as follows:

PART 155—[REVISED]

1. The authority citation for part 155 is revised to read as follows:

Authority: 33 U.S.C. 1231, 1321(j)(1) and (j)(5); sec. 2, E.O. 12777, 56 FR 54757; 49 CFR 1.46. Sections 155.100–155.130, 155.350–155.400, 155.430, 155.440, 155.470, and 155.1010–155.1070 also issued under 33 U.S.C. 1903(b), and §§ 155.1110–155.1150 issued under 33 U.S.C. 2735.

2. Section 155.140 is added to read as follows:

§ 155.140 Incorporation by reference.

(a) Certain material is incorporated by reference in this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in paragraph (b) of this section, the U.S. Coast Guard must publish notice of the change in the **Federal Register** and make the materials available to the public. All approved material is on file at the Office of the Federal Register, 1100 L Street NW., Washington, DC, and at the U.S. Coast Guard, Marine Environmental Protection Division (G–MEP), Room 2100, 2100 Second Street, SW., Washington, DC, 20593–0001, and is available from the sources identified in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are:

American Society for Testing and Materials (ASTM)

1916 Race Street, Philadelphia, PA 19103

ASTM Standard F 631–80, Standard Method for Testing Full Scale Advancing Spill Removal Devices (Reapproved 1985).	Appendix B.
ASTM Standard F 715–81, Standard Methods of Testing Spill Control Barrier Membrane Materials (Reapproved 1986).	Appendix B.
ASTM Standard F 808–83, Standard Guide for Collecting Skimmer Performance Data in Uncontrolled Environments (Reapproved 1988).	Appendix B.
ASTM Standard F 989–86, Standard Test Methods for Spill Control Barrier Tension Members, 1986.	Appendix B.

International maritime Organization (IMO)

IMO Sales, New York Nautical Instrument and Service Corp., 140W. Broadway, New York, NY 10013

IMO Resolution A.648(16), General Principles for Ship Reporting Systems and Ship Reporting Requirements, Including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances, and/or Marine Pollutants (19 October 1989).	155.1035; 155.1045.

Oil Companies International Marine Forum (OCIMF)

6th Floor, Portland House, Stag Place London, SWIE 5BH, England

Ship-to-Ship Transfer Guide, Petroleum, Second Edition, 1988.	155.1035; 155.1040.

3. Part 155 is amended by adding new subparts D and E and Appendix B to read as follows:

PART 155—OIL POLLUTION PREVENTION REGULATIONS FOR VESSELS

* * * * *

Subpart D—Response Plans

Sec.
155.1010 Purpose.
155.1015 Applicability.
155.1020 Definitions.
155.1025 Operating restrictions and interim operating authorization.
155.1030 General response plan requirements.
155.1035 Response plan requirements for vessels carrying oil as a primary cargo.
155.1040 Requirements for unmanned tank barges.
155.1045 Requirements for vessels carrying oil as a secondary cargo.
155.1050 Response plan development and evaluation criteria.
155.1055 Training.
155.1060 Drills.
155.1065 Submission and approval procedures.
155.1070 Plan revision and amendment procedures.

Subpart E—Additional Response Plan Requirements for Certain Vessels Operating in Prince William Sound, Alaska

155.1110 Purpose and applicability.
155.1115 Definitions.
155.1120 Operating restrictions and interim operating authorization.
155.1125 Additional response plan requirements.
155.1130 Requirements for prepositioned response equipment.
155.1135 Response plan development and evaluation criteria.
155.1140 Special considerations for vessels contracting with a facility permitted under the Trans-Alaska Pipeline Authorization Act.
155.1145 Submission and approval procedures.
155.1150 Plan revision and amendment procedures.

* * * * *

Appendix B to Part 155—Guidelines for Determining and Evaluating Required Response Resources for Vessel Response Plans.

Subpart D—Response Plans

§ 155.1010 Purpose.

The purpose of this subpart is to establish requirements for oil spill response plans for certain vessels. The planning criteria identified are intended for use in response plan development and the identification of resources required to respond to the scenarios prescribed during the planning process. The specific criteria are not meant to be performance standards. They are planning criteria based on a set of assumptions that may not exist during an actual oil spill incident.

§ 155.1015 Applicability.

(a) Except as provided in paragraph (c) of this section, this subpart applies to each vessel that handles, stores, or transports oil in bulk as cargo or cargo residue, and that—

(1) Is a vessel of the United States;

(2) Operates on the navigable waters of the United States; or

(3) Transfers oil in bulk as cargo in a port or place subject to the jurisdiction of the United States.

(b) This subpart also applies to both the delivering and receiving vessels conducting bulk oil cargo lightering operations within the exclusive economic zone of the United States as defined in 33 U.S.C. 2701(8) where the cargo is destined for any port or place subject to the jurisdiction of the United States.

(c) This subpart does not apply to the following types of vessels:

(1) Public vessels and vessels deemed public vessels under 14 U.S.C. 827.

(2) Vessels that, although designed to carry oil in bulk as cargo, are not storing or carrying oil in bulk as cargo or cargo residue.

(3) Dedicated response vessels when conducting response operations in a response area.

(4) Vessels of opportunity.

(d) Vessels of the United States covered by this subpart that do not operate within the navigable waters or the exclusive economic zone of the United States must meet all requirements of this subpart except for identifying and ensuring the availability of, through contract or other approved means, response resources as required in § 155.1035.

§ 155.1020 Definitions.

In addition to the terms defined in this section, the definitions in § 155.110 apply to this subpart.

Adverse weather means the weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in § 155.1050, and ice, temperature, weather-related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Average most probable discharge means a discharge of 50 barrels of oil from the vessel.

Bulk means any volume of oil carried in an integral tank of the vessel and oil transferred to or from a marine portable tank or independent tank while on board a vessel.

Cargo means oil that is transported to and off-loaded at a destination by a vessel. It does not include—

(1) Oil carried in integral tanks, marine portable tanks, or independent tanks for use as fuel for machinery and boats carried aboard the vessel;

(2) Oil transferred from a towing vessel's fuel tanks to a vessel in its tow to operate installed machinery; or

(3) Oil temporarily handled, stored, or transported within the response area by a dedicated response vessel or vessel or opportunity used for the emergency recovery of oil from the surface of the water.

Contract or other approved means includes—

(1) A written contractual agreement with a response contractor identifying and ensuring the availability of the necessary personnel and equipment available within stipulated response times in specified geographic areas;

(2) Certification that the necessary personnel and equipment resources are owned or operated by the vessel owner or operator and are available within stipulated response times in specified geographic areas;

(3) Active membership in a local or regional oil spill removal organization that has identified necessary personnel and equipment to be available within stipulated response times in specified geographic areas; or

(4) When specifically authorized in this subpart and with the consent of the response contractor or oil spill removal organization, the identification of a response contractor or oil spill removal organization with necessary equipment and personnel which are available within stipulated response times in specified geographic areas.

Dedicated response vessel means a vessel whose service is limited exclusively to oil and hazardous substance spill response-related activities, including spill recovery and transport, response-related escorting, deployment of spill response equipment, supplies, and personnel, and spill response-related training, testing, drills, and research.

Exclusive economic zone means the zone contiguous to the territorial sea of United States extending to a distance 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Great Lakes means the Great Lakes and their connecting and tributary waters including the Calumet River as far as the Thomas J. O'Brien Lock and Controlling Works (between mile 326 and 327), the Chicago River as far as the east side of the Ashland Avenue Bridge (between mile 321 and 322), and the Saint Lawrence River as far east as the lower exit of Saint Lambert Lock.

Higher volume port area means an area specified in § 155.1050 (g).

Inland area means the area shoreward of the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) defined in §§ 80.740–80.850 of this chapter. The inland area does not include the Great Lakes or rivers and canals.

Maximum extent practicable means the planning criteria used to evaluate the response resource required to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a vessel in adverse weather, limited by available technology and the practical and technical limits on an individual vessel owner or operator. Specific criteria for defining this term as it relates to response plan development and evaluation are described in § 155.1050.

Maximum most probable discharge means a discharge of up to:

(1) 2,500 barrels of oil for vessels with an oil cargo capacity greater than 25,000 barrels; or

(2) 10% of the vessel's oil cargo capacity for vessels with a capacity of less than 25,000 barrels.

Nearshore area means the area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except that in the Gulf of Mexico it means the area extending seaward 12 miles from the line of demarcation (COLREG lines) defined in §§ 80.740–80.850 of this chapter.

Non-persistent or Group 1 oil means:

(1) a petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

(i) At least 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F); and

(ii) At least 95% of which by volume, distill at a temperature of 370 degrees C (700 degrees F);

(2) a non-petroleum oil with a specific gravity less than .8.

Non-petroleum oil means oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Ocean means the open ocean, offshore area, and nearshore area as defined in this subpart.

Offshore area means the area up to 38 nautical miles seaward of the outer boundary of the nearshore area.

Oil spill removal organization means an entity established in a given

geographic area to provide response resources required in this subpart.

Open ocean means the area from 38 nautical miles seaward to the outer boundary of the nearshore area to the seaward boundary of the exclusive economic zone.

Operator or vessel operator means any person, including, but not limited to, an owner or a demise charterer, responsible for the operation of a vessel. The operator of a towing vessel is not considered the operator of a vessel being towed.

Owner of vessel owner means any person holding legal or equitable title to a vessel; provided, however, that a person holding legal or equitable title to a vessel solely as security is not the owner. In a case where a Certificate of Documentation has been issued, the owner is the person or persons whose name or names appear on the vessel's Certificate of Documentation provided, however, that where a Certificate of Documentation has been issued in the name of a president or secretary of an incorporated company under 46 U.S.C. 15, such incorporated company is the owner.

Persistent oil means:

(1) A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this subpart, persistent oils are further classified based on specific gravity as follows:

(i) Group II—specific gravity less than .85.

(ii) Group III—specific gravity between .85 and less than .95.

(iii) Group IV—specific gravity .95 or greater.

(2) a non-petroleum oil with a specific gravity of .8 or greater. For the purposes of this subpart, these oils are further classified based on specific gravity as follows:

(i) Group II—specific gravity between .8 and less than .85.

(ii) Group III—specific gravity between .85 and less than .95.

(iii) Group IV—specific gravity .95 or greater.

Qualified individual means an English-speaking shore-based representative of a vessel owner or operator, located in the United States, available on a 24-hour basis, with unconditional written authority to implement the vessel's response plan. This includes—

(1) Activating and engaging in contracting with required oil spill removal organization(s);

(2) Acting as liaison with the predesignated Federal On-Scene Coordinator (OSC); and

(3) Obligating, either directly or through prearranged contracts, any funds required to carry out all required or directed oil response activities.

Response activities means the containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

Response area means the Captain of the Port (COTP) zone(s) as specified in part 3 of this title, or the planning area within that zone designated under section 311(j)(4) of the Federal Water Pollution Control Act (FWPCA), whichever is smaller, in which spill response activities are occurring.

Response resources means the personnel, equipment, supplies, and other capability necessary to perform the response activities identified in a response plan.

Rivers and canals mean bodies of water confined within the inland area that have a controlled navigable depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Spill management team means the personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation

Substantial threat of such a discharge means any incident involving a vessel that may create a significant risk of discharge of fuel or cargo oil. Such incidents include, but are not limited to groundings, strandings, collisions, hull damage, fire, explosion, loss of propulsion, flooding, on-deck spills, or other similar occurrences.

Vessel of opportunity means a vessel engaged in spill response activities that is normally and substantially involved in activities other than spill response, and not normally involved in the carriage of oil in bulk as primary cargo.

Vessels carrying oil as a primary cargo means all vessels engaged in the carriage of oil that have a Certificate of Inspection issued under 46 CFR subchapter D (except for dedicated response vessels), Certificate of Compliance, or Tank Vessel Examination Letter.

Vessels carrying oil as a secondary cargo means vessels carrying oil pursuant to a permit issued under 46 CFR subchapter D (30.01–5), 46 CFR subchapter H (70.05–35), or 46 CFR subchapter I (90.05–35), an International Oil Pollution Prevention (IOPP) or Noxious Liquid Substance (NLS) certificate required by 33 CFR 151.33 or 151.35, or any uninspected vessel that carries oil in bulk as cargo.

Worst case discharge means a discharge in adverse weather conditions of a vessel's entire oil cargo.

§ 155.1025 Operating restrictions and interim operating authorization.

(a) After February 18, 1993, the owner or operator of each vessel to which this subpart applies shall submit a response plan meeting the requirements of § 155.1030 prior to—

(1) Handling, storing, or transporting oil on the navigable waters of the United States;

(2) Transferring oil in any other port or place subject to U.S. jurisdiction; or

(3) Performing vessel-to-vessel lightering operations within the exclusive economic zone.

(b) After August 18, 1993, vessels subject to this subpart may not perform the functions listed in paragraph (a) of this section unless operating in full compliance with a plan approved under § 155.1065.

Notwithstanding the requirements of paragraph (b) of this section, a vessel may continue to handle, store, transport, transfer, or lighter oil for two years after the date of submission of a response plan, pending approval of that plan, if the vessel owner or operator certifies to the U.S. Coast Guard that the owner or operator has identified and ensured the availability of, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or substantial threat of such a discharge from their vessel (as described in § 155.1050).

(d) With respect to paragraph (c) of this section, a vessel may not continue to handle, store, transport, transfer, or lighter oil if—

(1) The U.S. Coast Guard determines that the response resources identified in the vessel's certification statement do not meet the requirements of this subpart;

(2) The contracts or agreements cited in the vessel's certification statement are no longer valid;

(3) The vessel is not operating in compliance with the submitted plan; or

(4) The period of this authorization expires.

(e) A vessel may be authorized by the applicable COTP to make one voyage to transport or handle oil in port or geographic area not covered by an approved response plan. All requirements of this subpart must be met for any subsequent voyages to that port or geographic area. To be authorized, the vessel owner or operator shall certify to the COTP that—

(1) A response plan meeting the requirements of this subpart, except for

the applicable geographic specific appendix, or a shipboard oil pollution emergency plan approved by the flag state that meets the requirements of Regulation 26 of Annex I to the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto, as amended (MARPOL 73/78), is aboard the vessel;

(2) The vessel owner or operator has identified and informed the vessel crew and COTP of the designated qualified individual prior to the vessel's entry to the port of geographic area; and

(3) The vessel owner or operator has identified and ensured the availability of, through contract or other approved means, the private personnel and equipment necessary to respond, to the maximum extent practicable (under the criteria in § 155.1050), to a worst case discharge or substantial threat of discharge from the vessel in the applicable port or geographic area.

§ 155.1030 General response plan requirements.

(a) The plan must be written in English and, if applicable, in a language that is understood by the crew members responsible for carrying out the plan.

(b) A response plan for a vessel carrying oil as a primary or a secondary cargo under §§ 155.1035 and 155.1045 and the core response plan for an unmanned tank barge under § 155.1040 must be divided into the following sections in the order listed below unless noted otherwise:

(1) General information and introduction.

(2) Notification procedures.

(3) Shipboard spill mitigation procedures.

(4) Shore-based response activities.

(5) List of contacts.

(6) Training procedures.

(7) Drill procedures.

(8) Plan review and update procedures.

(9) Geographic-specific appendix for each zone in which the vessel operates.

(10) Appendix for vessel-specific information for each vessel covered by the plan (for vessels carrying oil as a primary cargo and unmanned tank barges).

(c) In addition to the core plan, unmanned tank barges must have an onboard notification checklist and emergency procedures.

(d) The required contents for each section of the plan are contained in §§ 155.1035, 155.1040, and 155.1045 as applicable to the type or service of the vessel.

(e) The response plan for a dedicated response vessel operating outside the response area must follow the same format as that for a vessel carrying oil as a secondary cargo under § 155.1045.

(f) A response plan must be in the format described in paragraph (b) of this section unless the plan was completed prior to [*the effective date of this subpart*]. A plan completed prior to [*the effective date of this subpart*] that does not follow this format must be supplemented with a cross-reference section to identify the location of the applicable sections required by this subpart and must be submitted in the required format at the next required resubmission date specified in § 155.1070.

(g) The information contained in a response plan must be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR part 300) and the Area Contingency Plan(s) (ACP) covering areas in which the vessel operates.

§ 155.1035 Response plan requirements for vessels carrying oil as a primary cargo.

(a) *General information and introduction.* This section of the response plan must include—

(1) The vessel's name, country of registry, and official number;

(2) The name, address, and procedures for contacting the vessel's owner or operator on a 24-hours basis;

(3) Identification of the geographic areas covered by the plan. The plan must identify the COTP zones, as defined in part 3 of this title, covered by the plan. The plan must cover all areas in which the vessel intends to handle, store, or transport oil, including port areas and offshore transit areas within the exclusive economic zone. A geographic-specific appendix must be included for each COTP zone identified:

(4) A table of contents and index identifying specific sections of the plan; and

(5) A record of change(s) page to record information on plan updates or revisions.

(b) *Notification procedures.* This section of the response plan must include—

(1) A checklist with all notifications in order of priority to be made by shipboard or shore-based personnel and the information required for those notifications;

(2) A discussion of the notification requirements that apply in the vessel's area of operation including—

(i) The requirements of MARPOL 73/78 and the FWPCA (33 U.S.C. 1321) as amended; and

(ii) Any applicable State or local notification requirements. These may be included in the geographic-specific appendix;

(3) Identification of the person(s) to be notified of a discharge or substantial threat of a discharge of oil. If these notifications vary due to vessel location, they must be included in a geographic-specific appendix. This section must separately identify—

(i) The individual(s) or organization(s) to be notified by shipboard personnel;

(ii) The individual(s) or organization(s) to be notified by shore-based personnel;

(iii) The procedures for notifying the qualified individual(s) designated by the vessel's owner or operator; and

(4) Descriptions of the primary and secondary communications methods by which the notifications will be made;

(5) The information to be provided in the initial and follow-up notifications. Notification information must include the information identified in IMO Resolution A648(16) "General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances, and/or Marine Pollution." The initial notification must include—

(i) Vessel name, country of registry, and official number;

(ii) Date and time of the incident;

(iii) Location of the incident;

(iv) Course, speed, and intended track of vessel;

(v) Type of oil involved;

(vi) Nature of the incident (e.g. grounding, collision, etc.);

(vii) Estimate of oil discharged or threat of discharge;

(viii) Weather conditions on scene; and

(ix) Actions taken or planned by persons on scene;

(6) Identification of the person(s) to be notified of a vessel casualty potentially affecting the seaworthiness of a vessel and the information to be provided by the vessel's crew to shore-based personnel to facilitate the assessment of damage stability and stress.

(c) *Shipboard spill mitigation procedures.* This section of the response plan must include—

(1) The total volumes of oil cargo and fuel that would be involved in the—

(i) Maximum most probable discharge; and

(ii) Worst case discharge;

(2) Procedures for the crew to mitigate or prevent any discharge or a substantial threat of such discharge of oil resulting from shipboard operational activities associated with internal or external cargo or fuel transfers. Responsibilities of vessel personnel

should be identified by job title. These procedures must address personnel actions in the event of a—

(i) Transfer system leak;

(ii) Tank overflow; or

(iii) Suspected cargo tank, fuel tank, or hull leak;

(3) Procedures in the order of priority for the crew to mitigate or prevent any discharge or a substantial threat of such a discharge in the event of the following casualties or emergencies:

(i) Grounding or stranding;

(ii) Collision;

(iii) Explosion and/or fire;

(iv) Hull failure;

(v) Excessive list; and

(vi) Equipment failure (e.g. main propulsion, steering gear, etc.);

(4) Damage stability and hull stress considerations when performing shipboard mitigation measures. This section must identify—

(i) Activities in which the crew is trained and qualified to execute absent shore-based support or advice; and

(ii) The information to be collected by the vessel's crew to facilitate shore-based assistance;

(5) The location of vessel plans necessary to perform salvage, stability, and hull stress assessments. A copy of these plans must be maintained ashore by either the vessel owner or operator or the vessel's recognized classification society unless the vessel has prearranged for a shore-based damage stability and residual strength calculation program with the vessel's baseline strength and stability characteristics pre-entered. The response plan must indicate the shore location of these plans or calculation program and 24-hour access procedures. The plan must identify the location of the—

(i) General arrangement plan;

(ii) Midship section plan;

(iii) Lines plan or table of offsets;

(iv) Tank tables;

(v) Load line assignment; and

(vi) Light ship characteristics;

(6) The procedures for both internal and ship-to-ship transfers of cargo or fuel in an emergency;

(i) The format and content of the ship-to-ship transfer procedures must be consistent with the Ship-to-Ship Transfer Guide (Petroleum) published jointly by the International Chamber of Shipping and the Oil Companies International Marine Forum (OCIMF);

(ii) The procedures must identify the availability, location, and contact numbers for obtaining suitable—

(A) Fendering equipment;

(B) Transfer hoses and connection equipment;

(C) Portable pumps and ancillary equipment;

(D) Lightering and mooring masters; and

(E) Vessel and barge brokers;

(iii) Reference can be made to a separate oil transfer procedure and lightering plan carried aboard the vessel provided that safety considerations are summarized in the response plan;

(iv) The location of all equipment and fittings carried aboard the vessel to perform such transfers must be identified;

(7) The procedures and arrangements for emergency towing, including the rigging and operation of any emergency towing equipment aboard the vessel;

(8) The location, crew responsibilities, and procedures for use of shipboard equipment to mitigate an oil discharge;

(9) The crew responsibilities for recordkeeping and sampling of spilled products. Any requirements for sampling must address safety procedures to be followed by the crew.

(d) *Shore-based response activities.* This section of the response plan must include the identification of—

(1) The crew's responsibilities to initiate a response and supervise shore-based resources pending the arrival of the qualified individual;

(2) The qualified individual's responsibilities and authority, including notification of the oil spill removal organization(s) identified in the plan;

(3) The procedures for transferring responsibility for direction of response activities from vessel personnel to the qualified individual or other shore-based personnel;

(4) The procedures for coordinating the actions of the vessel owner or operator with the predesignated Federal On-Scene Coordinator responsible for overseeing or directing those actions;

(5) The organizational structure that will be used to manage the response actions, including—

(i) Command and control;

(ii) Public information;

(iii) Safety;

(iv) Liaison with government agencies;

(v) Spill Operations;

(vi) Planning;

(vii) Logistics support; and

(viii) Finance;

(6) (i) Oil spill removal organizations and the spill management team identified and ensured available, through contract or other approved means, to respond to the following spill scenarios:

(A) Average most probable discharge;

(B) Maximum most probable discharge; and

(C) Worst case discharge to the maximum extent practicable;

(ii) The oil spill organization(s) and the spill management team identified in paragraph (d)(6)(i) of this section must provide the following response resources:

(A) Equipment and supplies to meet the requirements of § 155.1050; and

(B) Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization and spill management team for the first seven days of the response;

(iii) The information required under paragraph (d)(6)(i) of this section must be separately identified in the applicable geographic-specific appendix for each COTP zone in which the vessel will handle, store, or transport oil as cargo.

(e) *List of contacts.* This section of the response plan must include information on 24-hour contact of key individuals and organizations. The following information must be included in this section or, if more appropriate, in a geographic-specific appendix:

(1) A list of contacts for the vessel owner, operator, and if applicable, the charterer;

(2) Identification of the qualified individual(s) for the vessel's area of operation. The plan must identify a primary and an alternate contact located in the United States with the full authority to act as the qualified individual;

(3) Identification of the vessel's Protection and Indemnity (P&I) Club representatives for the vessel's area of operation;

(4) Identification of the vessel's local agent(s) for the vessel's area of operation;

(5) Identification of other applicable insurance representatives or surveyors for the vessel's area of operation; and

(6) Identification of the contact(s) to notify for activation of the response resources identified in paragraph (d)(6) of this section for the vessel's area of operation.

(f) *Training procedures.* This section must address the training procedures and programs of the vessel owner or operator to meet the requirements of § 155.1055.

(g) *Drill procedures.* This section must address the drill program to be carried out by the vessel owner or operator to meet the requirements in § 155.1060.

(h) *Plan review and update procedures.* This section must address—

(1) The procedures to be followed by the vessel owner or operator to meet the requirements of § 155.1070; and

(2) The procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness;

(i) *Geographic-specific appendices for each COTP zone in which a vessel operates.* These appendices must include—

(1) Any required Federal or State notifications for the areas in which a vessel operates;

(2) Identification of the qualified individual;

(3) Identification of the oil spill removal organization and the spill management team that are identified and ensured available, through contract or other approved means, to respond to the following spill scenarios to the maximum extent practicable, including equipment and supplies to meet the requirements of § 155.1050, and trained personnel to continue operation of the equipment and staff the oil spill removal organization and spill management team identified for the first seven days of the response:

(i) Average most probable discharge;

(ii) Maximum most probable discharge; and

(ii) Worst case discharge.

(j) *Appendices for vessel-specific information.* This section must include the—

(1) List of the vessel's principal characteristics;

(2) Capacities of all cargo, fuel, lube oil, ballast, and fresh water tanks;

(3) Diagrams showing location of all tanks;

(4) General arrangement plan (can be maintained separately aboard vessel providing the plan identifies the location);

(5) Midships section plan (can be maintained separately aboard vessel providing the plan identifies the location);

(6) Cargo and fuel piping diagrams and pumping plan, as applicable (can be maintained separately aboard vessel providing the plan identifies the location);

(7) Damage stability data;

(8) Cargo and fuel stowage plan for vessel (can be maintained separately aboard vessel providing the plan identifies the location); and

(9) Information on the oil cargo and fuel aboard the vessel. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, (cargo information required by 33 CFR 154.310), or equivalent will meet this requirement (can be maintained separately aboard vessel providing the plan identifies the location). This information must include the—

(i) Name;

(ii) Description;

(iii) Physical and chemical characteristics;

(iv) Health and safety hazards; and

(v) Spill and firefighting procedures.

§ 155.1040 Requirements for unmanned tank barges.

(a) *Onboard notification checklist and emergency procedures.* This portion of the response plan is the only portion that must be maintained aboard the vessel. The remaining portion of the response plan as described in paragraphs (b)–(k) of this section (core plan) may be maintained elsewhere. The owner or operator of an unmanned tank barge subject to this section shall provide the personnel of the towing vessel, fleeting area, or facility that the barge may be moored at with the information required by this paragraph and the responsibilities that the plan indicates will be carried out by them. This information must be carried in the documentation container aboard the barge. This portion of the response plan must include—

(1) The name, address, and procedure for contacting the vessel's owner or operator on a 24-hour basis;

(2) The name and procedures for contacting a primary qualified individual and at least one alternate on a 24-hour basis;

(3) The toll-free number of the National Response Center;

(4) A list of information to be provided in the notification by the reporting personnel; and

(5) A statement of responsibilities of and actions to be taken by reporting personnel after an oil discharge or substantial threat of such discharge.

(b) *General information and introduction.* This section of the core response plan must include—

(1) A list of tank barges covered by the plan;

(2) The name, address, and procedure for contacting the barge owner or operator on a 24-hour basis;

(3) Identification of the geographic areas covered by the plan (The plan must identify COTP zones, as defined in part 3 of this title, covered by the plan. The plan must cover all areas in which the tank barges covered by the plan intend to handle, store, or transport oil, including port areas and offshore transit areas in the exclusive economic zone. A geographic-specific appendix must be included for each COTP zone identified);

(4) A table of contents and index identifying specific sections of the plan; and

(5) A record of change(s) page used to record information on plan updates or revisions.

(c) *Notification procedures.* This section of the core response plan must include—

(1) A checklist of the notifications in the order of priority and the information required for those notifications to be made by the—

(i) Towing vessel;

(ii) Vessel owner or operator; or

(iii) Qualified individual;

(2) A discussion of the notification requirements that apply in the area(s) of operation of the barges covered by the plan. This must include—

(i) The requirements of section 311 of the FWPCA (33 U.S.C. 1321); and

(ii) Any applicable State and local notification requirements. These must be included in the geographic-specific appendices;

(3) Identification of the persons to be notified of a discharge. The notifications that vary due to the location of the barge must be included in the appropriate geographic-specific appendix. This section must separately identify—

(i) The individual(s) or organization(s) to be notified by the towing vessel;

(ii) The individual(s) or organization(s) to be notified by the barge owner or operator; and

(iii) The procedures for notification of the qualified individual(s);

(4) Identification of the primary and secondary communications methods by which the notifications will be made;

(5) The information that is to be provided in the initial and any follow-up notifications. Notification information must include the—

(i) Towing vessel name;

(ii) Tank barge name and official number;

(iii) Time of the incident;

(iv) Location of the incident;

(v) Course, speed, and intended track of towing vessel;

(vi) Type of oil involved;

(vii) Nature of the incident (e.g. grounding, collision, etc.);

(viii) Estimate of oil discharged or threat of discharge;

(ix) Weather conditions on scene; and

(x) Actions taken or planned by persons on scene;

(d) *Shipboard spill mitigation procedures.* This section of the core response plan must include—

(1) Identification of procedures to be followed by the tankerman, as defined in 46 CFR 35.35–01, to mitigate or prevent any discharge or a substantial threat of such a discharge of oil resulting from operational activities associated with internal or external cargo or fuel transfers. These procedures must address personnel actions in the event of a—

(i) Transfer system leak;

(ii) Tank overflow; or

(iii) Suspected cargo tank, fuel tank, or hull leak;

(2) Procedures in the order of priority for the towing vessel or barge owner or operator to mitigate or prevent any discharge or a substantial threat of such a discharge of oil in the event of the following casualties or emergencies:

(i) Grounding or stranding;

(ii) Collision;

(iii) Explosion or fire, or both;

(iv) Hull failure; and

(v) Excessive list;

(3) Damage stability and hull stress considerations when performing onboard mitigation measures. This secion must identify—

(i) Activities in which the towing vessel crew or tankerman is trained and qualified to execute absent shore-based support or advice;

(ii) The individuals who shall be notified of casualty potentially affecting the seaworthiness of the barge; and

(iii) The information that must be provided by the towing vessel to facilitate the assessment of damage stability and stress;

(4) Location of barge plans that may be required to perform salvage, stability, and hull stress assessments. A copy of these plans must be maintained ashore by either the barge owner or operator or the vessel's recognized classification society. The response plan must indicate the location of these plans and 24-hour access procedures. The plan must identify the location of the—

(i) General arrangement plan;

(ii) Midship section plan;

(iii) Lines plan or table of offsets; and

(iv) Tank tables;

(5) The procedures for both internal and ship-to-ship transfers of cargo in an emergency;

(i) The format and content of the ship-to-ship transfer procedures must be consistent with the Ship-to-Ship Transfer Guide (Petroleum) published jointly by the International Chamber of Shipping and the Oil Companies International Marine Forum (OCIMF);

(ii) The procedures must identify the availability, location, and contact numbers for obtaining suitable—

(A) Fendering equipment;

(B) Transfer hoses and connection equipment;

(C) Portable pumps and ancillary equipment; and

(D) Lightering vessels;

(iii) Reference can be made to separate oil transfer procedures or a lightering plan provided that safety considerations are summarized in the response plan;

(iv) The location of all equipment and fittings carried aboard the barge to perform such transfers must be identified;

(6) The procedures and arrangements for emergency towing, including the rigging and operation of any emergency towing equipment aboard the barge;

(7) The location, crew responsibilities, and procedures for use of shipboard equipment to mitigate an oil discharge;

(e) *Shore-based response activities.* This section of the core response plan must contain—

(1) The responsibilities of the towing vessel crew and facility or fleeting area personnel to initiate and supervise a shore-based response pending the arrival of the qualified individual or other response resources identified in the response plan;

(2) The qualified individual's responsibilities and authority, including notification of the response resources identified in the plan;

(3) The procedures for coordinating the actions of the barge owner or operator with the action of the predesignated Federal OSC responsible for monitoring or directing those actions;

(4) The oil spill removal organization structure that will manage the barge owner or operator's response actions including—

(i) Command and control;

(ii) Public information;

(iii) Safety;

(iv) Liaison with government agencies;

(v) Spill Operations;

(vi) Planning;

(vii) Logistics support; and

(viii) Finance;

(5) Identification of the oil spill removal organization and spill management team available, through contract or other approved means, to respond to the spill scenarios listed below. This must include both the equipment and supplies necessary to meet the requirements of § 155.1050, and the trained personnel necessary to sustain operation of the equipment and staff the oil spill removal organization and spill management team for the first seven days of the response to an:

(i) Average most probable discharge;

(ii) Maximum most probable discharge; and

(iii) Worst case discharge to the maximum extent practicable.

(6) The information required under paragraph (e)(5) of this section must also be separately identified in the applicable geographic-specific appendix for each COTP zone in which the barge will handle, store, or transport oil as cargo.

(f) *List of contacts.* This section of the core response plan must contain information on 24-hour contact of key individuals or organizations. If more appropriate, this information may be in a geographic-specific appendix and referenced in this section. The following information must be included—

(1) A list of contacts for the barge owner, operator, and the applicable charterer;

(2) Primary and alternate individual(s) for the barge's area(s) of operation, located in the United States, with full authority to act as the qualified individual;

(3) Other applicable insurance representatives or surveyors for the barge's area(s) of operation; and

(4) Contact(s) to notify for activation of the response resources identified in paragraph (e)(5) of this section for the barge's area(s) of operation.

(g) *Training procedures.* This section of the core response plan must address the training procedures and programs of the barge owner or operator to meet the requirements in § 155.1055.

(h) *Drill procedures.* This section of the core response plan must address the drill program carried out by the barge owner or operator to meet the requirements in § 155.1060.

(i) *Plan review and update procedures.* This section of the core response plan must address—

(1) The procedures to be followed by the barge owner or operator to meet the requirements of § 155.1070; and

(2) The procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness.

(j) *Geographic-specific appendices for each COTP zone in which the tank barge will operate.* These appendices in the core response plan must include—

(1) Any required Federal or State notifications for the areas in which the barge operates;

(2) Identification of the qualified individual(s); and

(3) Identification of the oil spill removal organization and spill management team available, through contract or other approved means, to respond to the spill scenarios listed below. This must include both the equipment and supplies necessary to meet the requirements of § 155.1050, and the trained personnel necessary to sustain operation of the equipment and staff the oil spill removal organization and spill management team for the first seven days of the response for an:

(i) Average most probable discharge;

(ii) Maximum most probable discharge; and

(iii) Worst case discharge to the maximum extent practicable.

(k) *Appendices for barge-specific information.* Because many of the tank barges covered by a core response plan

may be of the same design, this information does not need to repeated provided the plan identifies the tank barges to which the same information would apply. The information must be part of the core response plan unless specifically noted. This section must include the following barge-specific information:

(1) For each tank barge covered by the plan, identification of the total volumes of oil cargo that would be involved in the—

(i) Average most probable discharge;

(ii) Maximum most probable discharge; and

(iii) Worst case discharge;

(2) Capacities of all cargo, fuel, lube oil, and ballast tanks;

(3) Diagrams showing location of all tanks aboard barge;

(4) General arrangement plan (can be maintained separately providing that the location is identified);

(5) Midships section plan (can be maintained separately providing that the location is identified);

(6) Cargo and fuel piping diagrams and pumping plan (can be maintained separately providing that the location is identified);

(7) Damage stability data;

(8) Cargo and fuel stowage plan for barge (can be maintained separately providing that the location is identified); and

(9) Information on the name, description, physical and chemical characteristics, health and safety hazards, and spill and firefighting procedures for the oil cargo and fuel aboard the barge. A material safety data sheet meeting the requirements of 29 CFR 1910.1200, cargo information required by 33 CFR 154.310, or equivalent will meet this requirement and can be maintained separately.

§ 155.1045 Requirements for vessels carrying oil as a secondary cargo.

(a) For vessels that transfer a portion of their fuel as cargo, 50% of the fuel capacity of the vessel in addition to the volume of any oil cargo tank is assumed to be the cargo volume for determining response plan requirements.

(b) *General information and introduction.* This section of the response plan must include—

(1) The vessel's name, country of registry, and official number;

(2) The name, address, and procedures for contacting the vessel's owner or operator on a 24-hour basis;

(3) Identification of the geographic areas covered by the plan. The plan must identify the COTP zones that it covers, as defined in 33 CFR part 3. The plan must cover all areas in which the vessel intends to handle, store, or transport oil, including port areas and offshore transit areas within the exclusive economic zone. A geographic-specific appendix must be included for each COTP zone identified if the vessel operates in more than one zone.

(4) A table of contents and index identifying specific sections of the plan;

(5) A record of change(s) page used to record information on plan updates or revisions.

(c) *Notification procedures.* This section of the response plan must include—

(1) A checklist of all notifications in the order of priority to be made by shipboard or shore-based personnel and the information required for those notifications.

(2) A discussion of the notification requirements that apply in the vessel's area of operation. This must include—

(i) The requirements of MARPOL 73/78 and the FWPCA (33 U.S.C. 1321) as amended; and

(ii) Any applicable State or local notification requirements. These must be included in the geographic-specific appendix;

(3) Identification of the person(s) or organization(s) to be notified of a discharge or substantial threat of discharge of oil from the vessel. If notifications vary due to vessel location they must be included in a geographic-specific appendix. This section must separately identify—

(i) The individual(s) or organization(s) to be notified by shipboard personnel;

(ii) The individual(s) or organization(s) to be notified by shore-based personnel; and

(iii) The procedures for notifying the qualified individual(s);

(4) Identification of the primary and secondary communication methods by which the notifications will be made;

(5) The information to be provided in the initial and any follow-up notifications. Notification information must include that identified in IMO Resolution A648(16) covering "General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollution." The initial notification must include—

(i) Vessel name, country of registry, and official number;

(ii) Date and time of the incident;

(iii) Location of the incident;

(iv) Course, speed, and intended track of vessel;

(v) Type of oil involved;

(vi) Nature of the incident (e.g. grounding, collision, etc.);

(vii) Estimate of oil discharged or threat of discharge;

(viii) Weather conditions on scene; and

(ix) Actions taken or planned by persons on scene.

(d) *Shipboard spill mitigation procedures.* This section of the response plan must identify the total volumes of oil cargo that would be involved in the maximum most probable discharge and the worst case discharge, and meet the applicable requirements of this paragraph.

(1) For vessels carrying 100 barrels or less of oil as cargo, the plan must include a basic emergency action checklist for vessel personnel including notification and actions to be taken to prevent or mitigate any discharge or substantial threat of such a discharge of oil from the vessel;

(2) For vessels carrying over 100, but less than 1,000 barrels of oil as cargo, the plan must include—

(i) General information on actions to be taken by vessel personnel to prevent or mitigate any discharge of oil or substantial threat of such a discharge from the vessel due to operational activities or casualties;

(ii) General information on damage control procedures to be followed by vessel personnel;

(iii) General information on procedures for internal or external transfer of oil cargo in an emergency; and

(iv) Procedures for use of any equipment carried aboard the vessel for spill mitigation;

(3) For vessels carrying from 1,000 to 5,000 barrels of oil as cargo, the plan must include—

(i) Detailed information on actions to be taken by vessel personnel to prevent or mitigate any discharge or substantial threat of such a discharge of oil from the vessel due to operational activities or casualties;

(ii) Detailed information on damage control procedures to be followed by vessel personnel;

(iii) Detailed procedures for internal or external transfer of oil cargo in an emergency; and

(iv) Procedures for use of any equipment carried aboard the vessel for spill mitigation;

(4) For vessels carrying over 5,000 barrels of oil as a secondary cargo, the plan must provide the information required by § 155.1035 for shipboard spill mitigation procedures.

(e) *Shore-based response activities.* This section of the response plan must include the identification of—

(1) Responsibilities and actions to be taken by vessel personnel to initiate and supervise shore-based response pending the arrival of the qualified individual;

(2) The qualified individual's responsibilities and authority, including notification of the oil spill removal organization(s) identified in the plan;

(3) The procedures for coordinating the actions of the vessel owner or operator's with the actions of the predesignated Federal OSC responsible for monitoring or directing those actions;

(4) The spill management team to be used by the vessel owner or operator to manage response plan implementation; and

(5) Oil spill removal organization(s) available to respond to an oil discharge in the vessel's area of operation. A response organization may not be identified in the plan unless the response organization has provided written consent to being identified in the plan as an available resource.

(f) *List of contacts.* This section of the response plan must contain information on contacting key individuals or organizations on a 24-hour basis. If more appropriate, this information may be in a geographic-specific appendix and referenced in this section. The following information must be included—

(1) A list of contacts for the vessel owner, operator, and if applicable, charterer;

(2) Primary and alternate individual(s), located in the United States, with full authority to act as the qualified individual;

(3) Identification of the vessel's local agent(s), if applicable, for the vessel's area of operation;

(4) Identification of applicable insurance representatives or surveyors for the vessel's area of operation; and

(5) Identification of the contact(s) to notify for activation of the oil spill removal organization(s) identified in paragraph (e)(4) of this section for the vessel's area of operation.

(g) *Training procedures.* This section of the response plan must address the training procedures and programs of the vessel owner or operator. The vessel owner or operator shall ensure that—

(1) All personnel with responsibilities under the plan receive training in their assignments and refresher training as necessary, and participate in any drills required under paragraph (h) of this section;

(2) Records of this training are maintained aboard the vessel.

(h) *Drill procedures.* This section of the response plan must address the drill program carried out by the vessel owner or operator to evaluate the ability of vessel and shore-based personnel to perform their identified functions in the plan. The required drill frequency for each category of vessel is as follows:

(1) For vessels carrying 100 barrels or less of oil as cargo—

(i) Vessel crew's onboard spill mitigation procedures and qualified individual notification drills must be conducted annually; and

(ii) Shore-based oil spill removal organization drills must be conducted biennially;

(2) For vessels carrying over 100 barrels up to 5,000 barrels of oil as cargo—

(i) Vessel crew's onboard emergency procedures and qualified individual notification drills must be conducted quarterly; and

(ii) Shore-based oil spill removal organization drills must be conducted annually;

(3) Vessels carrying over 5,000 barrels of oil as cargo must meet the drill requirements of § 155.1060.

(i) *Plan review and update procedures.*

(1) The owner or operator of a vessel covered by this section shall resubmit the plan to the U.S. Coast Guard for approval—

(i) Whenever there is a change in the cargo capacity or layout of the vessel;

(ii) Whenever there is a change in the vessel's configuration affecting the overall capability of the vessel; or

(iii) Within five years of the date of U.S. Coast Guard approval;

(2) The owner or operator of a vessel covered by this section shall notify the U.S. Coast Guard and other plan holders, and provide updated information as appropriate when changes occur in any of the following:

(i) Cargo systems;

(ii) Operating area;

(iii) Qualified individual;

(iv) Identified response resources;

(v) Emergency response procedure; and

(vi) Nature of vessel's operations.

(j) *Geographic-specific appendices for each COTP zone in which the vessel will operate.* This section must include—

(1) Any required Federal or State notifications for the area that the vessel will operate;

(2) Identification of the qualified individual; and

(3) A list of response resources identified in paragraph (e)(4) of this section for the vessel's area of operation.

§ 155.1050 Response plan development and evaluation criteria.

(a) The following criteria must be used to evaluate the operability of response resources identified in the response plan for the specified operating environment:

(1) Table 1 of appendix B of this part.

(i) The criteria in Table 1 of appendix B of this part are to be used solely for identification of appropriate equipment in a response plan.

(ii) These criteria only reflect conditions that would limit the use of certain mechanical response equipment and are not conditions that would limit response actions or affect normal vessel operations.

(2) Limitations that are identified in the Area Contingency Plans for the COTP zones in which the vessel operates, including—

(i) Ice conditions;

(ii) Debris;

(iii) Temperature ranges; and

(iv) Weather-related visibility.

(3) The COTP may reclassify a specific body of water or location within the COTP zone. Any reclassifications will be identified in the applicable Area Contingency Plan. Reclassifications may be to—

(i) A more stringent operating environment if the prevailing wave conditions exceed the significant wave height criteria during more than 35 percent of the year; or

(ii) A less stringent operating environment if the prevailing wave conditions do not exceed the significant wave height criteria for the less stringent operating environment during more than 35 percent of the year.

(b) Response equipment must—

(1) Meet or exceed the operating criteria listed in Table 1 of appendix B of this part; and

(2) Function in the applicable operating environment.

(c) The response plan must identify and ensure the availability of, through contract or other approved means, the response resources that will respond to the vessel's average most probable discharge.

(1) For a vessel that carries oil as its primary cargo, the response resources must include—

(i) Sufficient containment boom and the means of deployment, at or near the site of oil transfer operations; and

(ii) Oil recovery devices and recovered oil storage capacity capable of being at the transfer area within two hours of the detection of a spill during transfer operations involving vessels that carry oil as their primary cargo.

(2) For areas where vessel-to-vessel lightering is being carried out, multiple vessel transfer operations can be carried out without additional equipment being available.

(3) The required response resources may be contracted from a facility involved in the oil transfer operation.

(d) The response plan must identify and ensure the availability of the response resources, through contract or other approved means, to respond to a discharge up to the vessel's maximum most probable discharge volume.

(1) These resources must be prepositioned such that they can arrive at the scene of a discharge within—

(i) 12 hours of the discovery of an oil discharge in higher volume port areas and the Great Lakes;

(ii) 24 hours in all river, inland, nearshore and offshore areas; and

(iii) 24 hours plus travel time beyond 50 miles from shore for open ocean areas.

(2) The response resources include sufficient containment boom, oil recovery devices, and storage capacity for any recovery of up to the maximum most probable discharge planning volume.

(3) The response resources must be appropriate for the group(s) of oil carried.

(4) The location of storage, make, model, and effective daily recovery rate of each oil recovery device that is identified for plan credit must be included.

(5) The response resources identified for responding to up to a maximum most probable discharge must always be prepositioned in the area. These resources may not be mobilized to respond to a spill outside the area without the approval of the COTP.

(e) The response plan must identify and ensure the availability of, through contract or other approved means, resources necessary to respond to the worst case discharge volume of the oil cargo to the maximum extent practicable.

(1) The location of these resources must be suitable to meet the response times identified for the applicable geographic area(s) of operation and response tier.

(2) The response resources must be appropriate for—

(i) The capacity of the vessel;

(ii) Group(s) of oil carried as cargo; and

(iii) The geographic area(s) of vessel operation.

(3) The resources must include sufficient boom, oil recovery devices, and storage capacity to recover the planning volumes.

(4) The storage location, make, model, and effective daily recovery rate of each oil recovery device that is identified for plan credit must be included.

(5) The guidelines in appendix B to part 155 of this chapter must be used for calculating the quantity of response resources required to respond at each tier to the worst case discharge to the maximum extent practicable.

(f) Response equipment identified in a response plan must be capable of arriving on scene within the times specified in this paragraph for the applicable response tier in a higher volume port area, Great Lakes, and in other areas. Response times for these tiers from the time of discovery of a discharge are:

	Tier 1	Tier 2	Tier 3
Higher volume port area (except Prince William Sound which is covered by § 155.1135).	12 hrs.....	36 hrs.....	60 hrs.
Great Lakes	12 hrs.....	36 hrs.....	60 hrs.
All other river, inland nearshore, and offshore areas.	24 hrs.....	48 hrs.....	72 hrs.
Open Ocean (plus travel time beyond 50 miles from shore).	24 hrs+..	48 hrs+..	72 hrs+.

(g) The following areas are designated as higher volume port areas. These areas include any water area within 50 nautical miles seaward of the entrance to the specified port:

(1) Boston, MA.

(2) New York, NY.

(3) Delaware Bay and River.

(4) St. Croix, VI.

(5) Pascagoula, MS.

(6) Mississippi River from Southwest Pass, LA to Baton Rouge, LA.

(7) Lake Charles, LA.

(8) Sabine-Neches River, TX.

(9) Galveston Bay and Houston Ship Channel, TX.

(10) Corpus Christi, TX.

(11) Los Angeles/Long Beach Harbor, CA.

(12) San Francisco Bay and Sacramento River, CA.

(13) Straits of Juan De Fuca and Puget Sound, WA.

(14) Prince William Sound, AK.

(h) For the purposes of arranging for response resources through contract or other approved means, response equipment identified for Tier 1 plan credit must be capable of being mobilized and en route to the scene of a discharge within two hours of notification.

(1) The notification procedures identified in the plan must provide for notification and authorization of mobilization of identified Tier 1 response resources—

(i) Either directly or through the qualified individual; and

(ii) Within 30 minutes of a discovery of a discharge or substantial threat of discharge.

(i) Response resources identified for Tier 2 and Tier 3 plan credit must be notified and mobilized as necessary to arrive on scene within the time specified for the applicable tier.

(j) The response plan for a vessel that carries Groups 2 or 3 persistent oils as a primary cargo and operates in the offshore or open ocean environments must identify and ensure the availability of, through contract or other approved means, resources to apply dispersants appropriate for the type of oil carried to treat the volume of vessel's single largest cargo tank. These resources must be capable of being on-scene within 24 hours of a discharge. Note: Identification of these resources does not imply that they will be authorized for use. Actual authorization for use during a spill response will be governed by the provisions of the NCP and the applicable Area Contingency Plan.

(k) Response plans must identify and ensure the availability of, through contract or other approved means, the following resources—

(1) A salvage company with expertise and equipment; and

(2) Private vessel with firefighting capability that will respond to casualties in the area(s) in which the vessel will operate.

(l) Response plans must identify and ensure the availability of, through contract or other approved means, resources required by §§ 155.1035(c)(6)(ii) and 155.1040(d)(5)(ii).

(1) These resources must include—

(i) Fendering equipment;

(ii) Transfer hoses and connection equipment; and

(iii) Portable pumps and ancillary equipment.

(2) These resources must be capable of reaching the locations in which the vessel operates within the stated times following notification:

(i) Inland, nearshore, and Great Lakes waters—12 hours.

(ii) Offshore waters—18 hours.

(iii) Open ocean waters—36 hours.

(m) The response plan must identify and ensure the availability of, through contract or other approved means, response resources necessary to perform shoreline protection operations.

(1) Until March 1, 1998, the response resources must include the quantities of boom specified in Table 2 of Appendix B of this part, based on the areas in which the vessel operates.

(2) After March 1, 1998, the shoreline protection resources must be those identified in the appropriate Area Contingency Plan.

(n) For a vessel operating in offshore, nearshore, inland, or river areas the response plan must identify and ensure the availability of, through contract or other approved means, an oil spill removal organization capable of effecting a shoreline cleanup operation commensurate with the quantity of emulsified oil to be planned for in shoreline cleanup operations.

(1) Until March 1, 1998, the shoreline cleanup resources required must be determined as described in appendix B of this part. For a vessel operating in the open ocean area, the response plan must identify an oil spill removal organization capable of effecting a shoreline cleanup operation commensurate with the quantity of emulsified oil to be planned for in shoreline cleanup operations, but there is no requirement to contract for those resources in advance.

(2) After March 1, 1998, the applicable shoreline cleanup resources must be those identified in the appropriate Area Contingency Plan.

(o) Appendix B of this part describes the procedures to determine the maximum extent practicable quantity of resources that must be identified and ensured available, through contract or other approved means, for each response tier. Included in appendix B of this part procedure is a cap that recognizes the practical and technical limits of response capabilities that an individual vessel owner or operator can contract for in advance. Table 6 in appendix B lists the caps that will apply in March 1993, March 1998, and March 2003. Depending on the quantity and type of oil carried as cargo and vessel geographic area of operations, the resource capability caps in this table may be reached.

§ 155.1055 Training.

(a) A response plan submitted to meet the requirements of §§ 155.1035 and 155.1040 must identify the training to be provided to each individual with responsibilities under the plan. The training program must differentiate between that provided to vessel personnel and that provided to shore-based personnel.

(b) A vessel owner or operator shall ensure that records sufficient to document this training are maintained and available for inspection by the U.S. Coast Guard.

(1) Records for vessel personnel must be maintained aboard the vessel.

(2) Records for shore-based personnel must be maintained either by the qualified individual or at a U.S. location of the oil spill removal organization identified in the plan.

(c) Nothing in this section relieves the vessel owner or operator from the responsibility to ensure that all shore-based response personnel are trained to meet the Occupational Safety and Health Administration (OSHA) standards for emergency response operations in 29 CFR 1910.120.

§ 155.1060 Drills.

(a) A vessel owner or operator required by §§ 155.1035 and 155.1040 to have a response plan shall conduct drills as necessary to ensure that the plan will function in an emergency. The drills must be both announced and unannounced. The response plan submitted to meet the requirements of this subpart must identify the planned drill program. The following are the required drill frequencies for vessels covered by this section:

(1) Manned vessel onboard emergency procedures and qualified individual notification drills must be conducted monthly.

(2) Unmanned barge emergency actions by the towing vessel crew and notification of the qualified individual drills must be conducted quarterly.

(3) Shore-based spill management team tabletop drills must be conducted yearly.

(4) Oil Spill removal organization field equipment deploying drills must be conducted yearly.

(b) Drills may be designed by the vessel owner or operator to exercise either components of or the entire response plan. The vessel owner or operator shall conduct a drill that exercises the entire plan at least once every three years.

(c) The vessel owner or operator shall ensure that records of drills are maintained in accordance with this paragraph.

(1) All drills conducted aboard the vessel must be documented in the ship's log.

(2) Records of any off-vessel drills of the response organization and resources identified in the response plan must be maintained by the qualified individual designated in the response plan.

(3) Records must be maintained for three years following completion of the drills.

(d) A vessel owner or operator shall participate in any unannounced drills conducted by the applicable COTP. During these drills, the oil spill removal organizational and spill management team identified in the vessel's response plan shall be activated to the extent required by the COTP.

(e) The requirements in paragraphs (a)(3) and (a)(4) of this section are met if the oil spill removal organization identified in the response plan are drilled during the period required to conduct such drills. The qualified individual shall maintain records of these drills and make them available to the U.S. Coast Guard.

§ 155.1065 Submission and approval procedures.

(a) An owner or operator of a vessel to which this subpart applies shall submit two English language copies of a vessel response plan meeting the requirements of §§ 155.1035, 155.1040, or 155.1045, as applicable, to the U.S. Coast Guard for review and approval.

(b) If the U.S. Coast Guard determines that the plan meets all requirements of this subpart, the U.S. Coast Guard will notify the vessel owner or operator and return one copy of the approved plan along with an approval letter. The plan will be valid for a period of up to five years from the date of approval.

(c) If the U.S. Coast Guard reviews the plan and determines that it does not meet all of the requirements, the U.S. Coast Guard will return one copy to the vessel owner or operator along with an explanation of the response plan's deficiencies. A revised plan must be resubmitted to the U.S. Coast Guard within 30 days of receipt of the letter describing the deficiencies.

(d) Copies of an approved response plan must be available as follows:

(1) The vessel owner or operator shall ensure that one English language copy of the approved response plan and the U.S. Coast Guard approval letter are maintained aboard the vessel. If applicable, an additional copy in the language understood by crew members with responsibilities under the plan must be carried.

(2) The vessel owner or operator and each person identified as a qualified individual in the plan shall maintain a copy of the plan.

§ 155.1070 Plan revision and amendment procedures.

(a) A vessel response plan must be reviewed annually by the owner or operator.

(1) This review must occur within one month of the anniversary date of U.S. Coast Guard approval of the plan.

(2) The owner or operator shall submit any required amendments to the U.S. Coast Guard for information or approval. If no changes are required, the owner or operator shall send a letter to the U.S. Coast Guard indicating that the plan remains valid with no changes. A

copy of this letter must be included in the front of each copy of the response plan and indicated in the record of changes page.

(3) Any required changes must be entered in the plan and noted on the record of changes page.

(b) Revisions or amendments to an approved response plan must be submitted for approval by the vessel's owner or operator whenever there is—

(1) A change in the vessel's operating area that includes ports or geographic area(s) not covered by the previously approved plan. A vessel may not operate in an area not covered in a previously approved plan unless the revised plan is approved or interim operating approval is received under § 155.1025;

(2) A change in the vessel's confirguration that significantly affects the information included in the response plan;

(3) A change in the type of oil cargo carried aboard (oil group) that affects the required response resources;

(4) A change in the name(s) and/or capabilities of the oil spill removal organization required by § 155.1050;

(5) A change in the vessel's emergency response procedures;

(6) Any other changes that significantly affect the implementation of the plan; or

(7) Five years from the date of U.S. Coast Guard approval.

(c) The U.S. Coast Guard may require a vessel owner or operator to revise a response plan at any time as a result of a compliance inspection if it is determined that the response plan does not meet the requirements of this subpart. The U.S. Coast Guard will notify the vessel owner or operator in writing of any deficiencies.

(1) Deficiencies involving the identification of a qualified individual or response resources must be corrected within three days.

(2) All other deficiences must be corrected within 30 days of receipt of the U.S. Coast Guard notice or the plan will be declared invalid and any further storage, transfer, or handling of oil in areas subject to the jurisdiction of the United States will be in violation of section 311(j)(5)(E) of the FWPCA.

(d) A vessel owner or operator who disagrees with a deficiency determination may submit a request for reconsideration within 7 days from the date of receipt of the U.S. Coast Guard notice. After considering all relevant material presented, the U.S. Coast Guard will notify the vessel owner or operator of the final decision.

(1) Unless the vessel owner or operator petitions for a review of the U.S. Coast Guard decision, the vessel's owner or operator will have 30 days from the date of the U.S. Coast Guard final determination to comply with the notice.

(2) If the vessel owner or operator petitions the District Commander, the effective date of the U.S. Coast Guard notice may be delayed pending a decision by the District Commander. Petitions to the District Commander must be submitted in writing, via the U.S. Coast Guard official who issued the requirement to amend the response plan, within five days of receipt of the notice.

(e) Except as required in paragraph (b) of this section, amendments to personnel and telephone number lists included in the response plan do not require prior U.S. Coast Guard approval. The U.S. Coast Guard and all other holders of the response plan shall be advised of the revisions and provided a copy of the revisions as they occur.

Subpart E—Additional Response Plan Requirements for Certain Vessels Operating in Prince William Sound, Alaska

§ 155.1110 Purpose and applicability.

(a) This subpart establishes oil spill response planning requirements for an owner or operator of a vessel carrying oil in bulk as cargo operating in Prince William Sound, Alaska, in addition to the requirements of subpart D of this part. The requirements of this subpart are intended for use in developing response plans and identifying response resources during the planning process, they are not performance standards.

(b) The information required in this subpart must be included in a Prince William Sound geographic-specific appendix to the vessel response plan required by subpart D of this part.

§ 155.1115 Definitions.

Except as provided in this section, the definitions in § 155.1015 apply to this subpart. As used in this subpart—

Certification of equipment means attesting that the equipment is on-site and is operable in accordance with the manufacturer's specification.

Crude oil means any liquid hydrocarbon mixture occurring naturally in the earth, whether or not treated to render it suitable for transportation, and includes crude oil from which certain distillate fractions may have been removed, and crude oil to which certain distillate fractions may have been added.

Non-crude oil means any oil other than crude oil.

Prince William Sound means all State and Federal waters within Prince William Sound, Alaska, including the approach to Hinchinbrook Entrance out to and encompassing Seal Rocks.

§ 155.1120 Operating restrictions and interim operating authorization.

The owner or operator of a vessel to which this subpart applies may not operate in Prince William Sound, Alaska, unless the requirements of this subpart as well as § 155.1025 have been met. The owner or operator of a vessel shall certify to the U.S. Coast Guard that they have identified, through an oil spill removal organization required by § 155.1125, the necessary response resources to remove, to the maximum extent practicable, a worst case discharge or a discharge of 200,000 barrels of oil, whichever is greater, in Prince William Sound.

§ 155.1125 Additional response plan requirements.

(a) The owner or operator of a vessel shall include the requirements of this section in the Prince William Sound geographic-specific appendix required by subpart D of this part.

(1) The response plan must include identification of an oil spill removal organization that shall—

(i) Perform response activities;

(ii) Provide oil spill removal and containment training, including training in the operation of prepositioned equipment, for personnel from the following locations in Prince William Sound—

(A) Valdez;

(B) Tatitlek;

(C) Cordova;

(D) Whittier;

(E) Chenega;

(F) Armin Koering fish hatchery;

(G) Main Bay fish hatchery;

(H) Wally Norenberg fish hatchery;

(I) Cannery Creek fish hatchery;

(J) Solomon Gulch fish hatchery; and

(K) Other locations in Prince William Sound, to be determined by the COTP;

(iii) Consist of sufficient numbers of trained personnel to remove, to the maximum extent practicable, a worst case discharge or a discharge of 200,000 barrels of oil, whichever is greater; and

(iv) Address the responsibilities required in § 155.1035(d)(5).

(2) The response plan must include drill procedures that must—

(i) Provide two drills of the oil spill removal organization each year that ensure preposition equipment and trained personnel required under this subpart perform effectively;

(ii) Provide for both announced and unannounced drills; and

(iii) Provide for drills that test either the entire appendix or individual components.

(3) The response plan must identify a testing, inspection, and certification program for the prepositioned reponse equipment required in § 155.1130 that must provide for—

(i) Annual testing and equipment inspection in accordance with the manufacturer's recommended procedures, to include—

(A) Start-up and running under load all electrical motors, pumps, power packs, air compressors, internal combustion engines, and oil recovery devices; and

(B) Removal of no less than one-third of required boom from storage;

(ii) Records of equipment tests and inspection.

(4) The response plan must identify and give the location of the prepositioned response resources required in § 155.1130 including the make, model, and effective daily recovery rate of each oil recovery resource.

(b) The owner or operator shall submit to the COTP for approval, no later than September 30th of each calendar year, a schedule for the training and drills required by the geographic-specific appendix for Prince William Sound for the following calendar year.

(c) All records required by this section must be available for inspection by the U.S. Coast Guard and must be maintained for a period of 3 years.

§ 155.1130 Requirements for prepositioned response equipment.

Except as permitted under § 155.1140, the owner or operator of a vessel carrying oil in bulk as cargo shall provide the following prepositioned response equipment, located within Prince William Sound, in addition to that required by §§ 155.1035, 155.1040 or 155.1045:

(a) On-water recovery equipment with a minimum effective daily recovery rate of 30,000 barrels for a vessel carrying crude oil or 3,000 barrels for a vessel over 15,000 deadweight tons (DWT) carrying non-crude oil, capable of being on scene within six hours of notification of a discharge.

(b) On-water storage capacity of 100,000 barrels for recovered oily material for a vessel carrying crude oil or 5,000 barrels for a vessel over 15,000 DWT carrying non-crude oil, capable of being on scene within six hours of notification of a discharge.

(c) On-water storage capacity of 300,000 barrels for recovered oily material for a vessel carrying crude oil, capable of being on scene within 24 hours of notification of a discharge.

(d) Equipment as identified below, for the locations identified in § 155.1125(a)(1)(ii), sufficient for the protection of the environment in these locations—

(1) On-water oil recovery devices and storage equipment;

(2) Boom appropriate for the specific locations;

(3) Sufficient boats to deploy boom and sorbents;

(4) Sorbents including booms, sweeps, pads, blankets, drums and plastic bags;

(5) Personnel protective clothing and equipment;

(6) Survival equipment;

(7) First aid supplies;

(8) Buckets, shovels, and various other tools;

(9) Decontamination equipment;

(10) Shoreline cleanup equipment;

(11) Mooring equipment;

(12) Anchored buoys at appropriate locations to facilitate the positioning of defensive boom; and

(13) Other appropriate removal equipment for the protection of the environment as identified by the COTP.

(e) For each oil-laden vessel transit, two escort vessels, each fitted with skimming and onboard storage capabilities that are practicable for the oil recovery planned for a cleanup operation, as identified by the oil spill removal organization.

(f) Lightering resources required in § 155.1035(c)(6) capable of arriving on scene within 6 hours of notification of a discharge.

§ 155.1135 Response plan development and evaluation criteria.

The following response times must be used in determining the on scene arrival time in Prince William Sound, for the response resources required by § 155.1050:

	Tier 1	Tier 2	Tier 3
Prince William Sound Area.	12 hrs.....	24 hrs.....	36 hrs

§ 155.1140 Special consideration for vessels contracting with a facility permitted under the Trans-Alaska Pipeline Authorization Act.

A vessel owner or operator may meet any of the requirements of this subpart by contracting with a facility permitted under the Trans-Alaska Pipeline Authorization Act. The extent to which these requirements are met by the contractual arrangement will be determined by the COTP.

§ 155.1145 Submission and approval procedures.

An appendix prepared under this subpart must be submitted and approved in accordance with § 155.1065.

§ 155.1150 Plan revision and amendment procedures.

An appendix prepared and submitted under this subpart must be revised and amended, as necessary, in accordance with § 155.1070.

Appendix B to Part 155—Guidelines for Determining and Evaluating Required Response Resources for Vessel Response Plans

1. Purpose

1.1 The purpose of this appendix is to describe the procedures for identifying response resources to meet the requirements of subpart D of this part. These guidelines will be used by the vessel owner or operator in preparing the response plan and by the Coast Guard to review vessel response plans.

2. Equipment Operability and Readiness

2.1 All equipment identified in a response plan must be designed to operate in the conditions expected in a geographic area in which a vessel operates. These conditions vary widely based on the location and season. Therefore, it is difficult to identify a single stockpile of response equipment that will function effectively in every geographic location.

2.2 Vessels storing, handling, or transporting oil in more than one operating environment as indicated in Table 1 must identify equipment capable of successfully functioning in each operating environment. For example, vessels moving from the ocean to a river port must identify appropriate equipment designed to meet the criteria for ocean, inland, and river areas. This may be equipment that is designed to operate in all of these environments or, more likely, different equipment designed for use in each area.

2.3 When identifying equipment for response plan credit, a vessel owner or operator must consider the inherent limitations in the operability of equipment components and response systems. The criteria in Table 1 must be used for evaluating the operability in a given environment. These criteria reflect the general conditions in certain operating areas.

2.4 Table 1 lists criteria for oil recovery devices and boom. All other equipment necessary to sustain or support response operations in a geographic area must be designed to function in the same conditions. For example, boats which deploy or support skimmers or boom must be capable of being safely operated in the significant wave heights listed for the applicable operating environment.

2.5 A vessel owner or operator must refer to the applicable Area Contingency Plan to determine if ice, debris, and weather-related visibility are significant factors in evaluating the operability of equipment. The Area Contingency Plan will also identify the

average temperature ranges expected in a geographic area in which a vessel operates. All equipment identified in a response plan must be designed to operate within those conditions or ranges.

2.6 The requirements of subpart D of this part establish response resource mobilization and response times. The location that the vessel operates farthest from the storage location of the response resources must be used to determine whether the resources can arrive on scene within the time required. A vessel owner or operator shall include the time for notification, mobilization, and travel time of resources identified to meet the maximum most probable discharge and Tier 1 worst case discharge requirements. Tier 2 and 3 resources must be notified and mobilized as necessary to meet the requirements for arrival on scene. An on water speed of 10 knots and a land speed of 35 miles per hour is assumed unless the vessel owner or operator can demonstrate otherwise.

2.7 In identifying equipment, the vessel owner or operator shall list the storage location, quantity, and manufacturer's make and model. For oil recovery devices, the effective daily recovery rate, as determined using section 6 of this appendix, must be included. For boom, the overall boom height must be included. A vessel owner or operator is responsible for ensuring that identified boom has compatible connectors.

3. Determining Response Resources Required for the Average Most Probable Discharge

3.1 A vessel owner or operator shall ensure that sufficient response resources are available to respond to the 50 barrel average most probable discharge. The equipment must be designed to function in the operating environment at the point of oil transfer.

3.1.1 These resources must be located at or near the site of operational transfers involving vessels that carry oil in bulk as a primary cargo:

.1 Containment boom in a quantity equal to twice the length of the largest vessel involved in the transfer and a means of immediate deployment.

.2 Oil recovery devices with an effective recovery rate of 50 barrel per day or greater available at the transfer site within two hours of the detection of an oil discharge.

.3 Oil storage capacity for recovered oily material indicated in section 9.2 of this appendix.

3.1.2 A vessel that carries oil in bulk as a secondary cargo must identify sources of equipment in its areas of operation. Deployment requirements in section 3.1.1 of this appendix need not be met for these vessels.

4. Determining Response Resources Required for the Maximum Most Probable Discharge

4.1 A vessel owner or operator shall ensure that sufficient response resources are available to respond to discharges up to the maximum most probable discharge volume for that vessel. This will require resources capable of containing and collecting up to 2,500 barrels of oil. All equipment identified must be designed to operate in the applicable operating environment specified in Table 1.

4.2 To determine the maximum most probable discharge volume to be used for planning, use the lesser of—

4.2.1 2500 barrels; or

4.2.2 10% of the total oil cargo capacity.

4.3 Oil recovery devices identified to meet the applicable maximum most probable discharge volume planning criteria must be located such that they arrive on scene within 12 hours in higher volume port areas and the Great Lakes and 24 hours in all other river, inland, nearshore, and offshore areas.

4.3.1 Because rapid control, containment, and removal of oil is critical to reduce spill impact, the effective daily recovery rate for oil recovery devices must equal 50% of the planning volume applicable for the vessel as determined in section 4.2 of this appendix. The effective daily recovery rate for oil recovery devices identified in the plan must be determined using the criteria in section 6 of this appendix.

4.4 In addition to oil recovery capacity, the plan must identify and ensure the availability of, through contract or other approved means, sufficient boom available within the required response times for oil collection and containment and for protection of shoreline areas. While the regulation does not set required quantities of boom, the response plan must identify and ensure the availability of the quantity of boom available through contract or other approved means.

4.5 The plan must indicate the availability of temporary storage capacity to meet the requirements of section 9.2 of this appendix. If available storage capacity is insufficient to meet this requirement, then the effective daily recovery rate must be derated to the limits of the available storage capacity.

4.6 The following is an example of a maximum most probable discharge volume planning calculation for equipment identification in a higher volume port area:

The vessel's capacity is 10,000 barrels, thus the planning volume is 10 percent or 1,000 barrels. The effective daily recovery rate must be 50% of this, or 500 barrels per day. The ability of oil recovery devices to meet this capacity will be calculated using the procedures in section 6 of this appendix. Temporary storage capacity available on scene must equal twice the daily recovery rate as indicated in section 9 of this appendix, or 1000 barrels per day. This is the information the vessel owner or operator would use to identify and ensure the availability of, through contract or other approved means, the required response resources. The vessel owner would also need to identify how much boom was available for use.

5. Determining Response Resources Required for the Worst Case Discharge to the Maximum Extent Practicable

5.1 A vessel owner or operator shall specify the availability of sufficient response resources to respond to the worst case discharge of oil cargo to the maximum extent practicable. Section 7 describes the method to determine the required response resources.

5.2 Oil spill recovery devices identified to meet the applicable worst case discharge planning volume must be located such that they can arrive at the scene of a discharge within the time specified for the applicable response tier listed in § 155.1050.

5.3 The effective daily recovery rate for oil recovery devices identified in a response plan must be determined using the criteria in section 6 of this appendix. A vessel owner or operator shall identify the storage locations of all equipment that must be used to fulfill the requirements for each tier. The owner or operator of a vessel whose required daily recovery capacity exceeds the applicable contracting caps in Table 6 shall identify sources of additional equipment, their locations, and the arrangements made to obtain this equipment during a response. While general listings of available response equipment may be used to identify additional sources, a response plan must identify the specific sources and quantities of equipment that a vessel owner or operator has considered in their planning.

5.4 In addition to oil spill recovery devices, a vessel owner or operator shall identify and ensure the availability of, through contract or other approved means, sufficient boom that can arrive on scene within the required response times for oil containment and collection and for protection of shoreline areas. Table 2 lists the minimum quantities of boom for shoreline protection that a vessel owner or operator shall identify and ensure the availability of, through contract or other approved means.

5.5 A vessel owner or operator shall identify the availability of temporary storage capacity to meet the requirements of section 9.2 of this appendix. If available storage capacity is insufficient to meet this requirement, then the effective daily recovery rate must be derated to the limits of the available storage capacity.

6. Determining Effective Daily Recovery Rate for Oil Recovery Devices

6.1 Oil recovery devices identified by a vessel owner or operator must be identified by manufacturer, model, and effective daily recovery rate. These rates must be used to determine whether there is sufficient capacity to meet the applicable planning criteria for the average most probable discharge; maximum most probable discharge; and worst case discharge to the maximum extent practicable.

6.2 For the purposes of determining the effective daily recovery rate of oil recovery devices, the following method will be used. This method considers potential limitations due to available daylight, weather, sea state, and percentage of emulsified oil in the recovered material. The Coast Guard may assign a lower efficiency factor to equipment listed in a response plan if it determines that such a reduction is warranted.

6.2.1 The following formula must be used to calculate the effective daily recovery rate:

$R = T \times 24 \text{ hours} \times E$

R—Effective daily recovery rate

T—Throughput rate in barrels per hour (nameplate capacity)

E—20% Efficiency factor (or lower factor as determined by Coast Guard)

6.2.2 For those devices in which the pump limits the throughput of liquid, throughput

rate will be calculated using the pump capacity.

6.2.3 For belt or mop type devices, the throughput rate will be calculated using the speed of the belt or mop; surface area of the belt or mop in contact with the water surface; and the oil encounter rate. For purposes of this calculation, the assumed thickness of oil will be 1/4 inch.

6.3 As an alternative to 6.2, a vessel owner or operator may submit adequate evidence that a different effective daily recovery rate should be applied for a specific oil recovery device. Adequate evidence is actual verified performance data in spill conditions or tests using ASTM Standard F 631–80, F 808–83 (1988), or an equivalent test approved by the Coast Gaurd.

6.3.1 The following formula must be used to calculate the effective daily recovery rate under this alternative:

$R = D \times U$

R—Effective daily recovery rate

D—Average Oil Recovery Rate in barrels per hour (Item 28 in F 808–83; Item 13.1.15 in F 631–80; or actual performance data)

U—Hours per day that a vessel owner or operator can document capability to operate equipment under spill conditions. Ten hours per day must be used unless a vessel owner or operator can demonstrate that the recovery operation can be sustained for longer periods.

6.4 A vessel owner or operator submitting a response plan shall provide data that supports the effective daily recovery rates for the oil recovery devices listed. The following is an example of these calculations:

A weir skimmer identified in a response plan has a manufacturer's rated throughput at the pump of 267 gallons per minute (gpm).

267 gpm = 381 barrels per hour

$R = 381 \times 24 \times .2 = 1829$ barrels per day

After testing using ASTM procedures, the skimmer's oil recovery rate is determined to be 220 gpm. The vessel owner or operator identifies sufficient resources available to support operations 12 hours per day.

220 gpm = 314 barrels per hour

$R = 314 \times 12 = 3768$ barrels per day

A vessel owner or operator will be able to use the higher rate if sufficient temporary oil storage capacity is available.

7. Calculating the Worst Case Discharge Planning Volumes

7.1 A vessel owner or operator shall plan for a response to a vessel's worst case discharge volume of oil cargo. The planning for on-water recovery must take into account a loss of some oil to the environment due to evaporative and natural dissipation, potential increases in volume due to emulsification, and the potential for deposit of some oil on the shoreline.

7.2 The following procedures must be used to calculate the planning volume used by a vessel owner or operator for determining required on water recovery capacity:

7.2.1 The following must be determined: the total volume of oil cargo carried, the appropriate cargo group for the type of oil carried [persistent (Groups 2, 3, 4) or nonpersistent (Group 1)], and the geographic area(s) in which the vessel operates. For vessels carrying mixed cargoes from different oil groups, each group must be calculated separately. This information is to be used with Table 3 to determine the percentages of the total cargo volume to be used for removal capacity planning. This table divides the cargo volume into three categories: oil lost to the environment; oil deposited on the shoreline; and oil available for on-water recovery.

7.2.2 The on-water oil recovery volume must be adjusted using the appropriate emulsification factor found in Table 4.

7.2.3 The adjusted volume is multiplied by the on-water oil recovery resource mobilization factor found in Table 5 from the appropriate operating area and response tier to determine the total on water oil recovery capacity in barrels per day that must be identified or contracted for to arrive on-scene within the applicable time for each response tier. Three tiers are specified. For higher volume port areas and the Great Lakes, the contracted tiers of resources must be located such that they can arrive on-scene within 12, 36, and 60 hours of the discovery of an oil discharge. For all other river, inland, nearshore, and offshore areas, these tiers are 24, 48, and 72 hours. For the open ocean area, the tiers are 24, 48, and 72 hours with an additional travel time allowance of one hour for every additional 10 nautical miles beyond 50 miles from shore.

7.2.4 The resulting on-water recovery capacity in barrels per day for each tier is used to identify response resources necessary to sustain operations in the applicable geographic area. The equipment must be capable of sustaining operations for the time period specified in Table 3. A vessel owner or operator shall identify and ensure the availability of, through contract or other approved means, sufficient oil spill recovery devices to provide the effective daily oil recovery capacity required. If the required capacity exceeds the applicable cap specified in Table 6, then a vessel owner or operator shall contract only for the quantity of resources required to meet the cap, but shall identify sources of additional resources as indicated in section 6.3 of this appendix. The owner or operator of a vessel whose planning volume exceeds the cap in 1993 must make arrangements for additional capacity to be under contract by 1998 or 2003, as appropriate. For a vessel that carries multiple groups of oil, the required effective daily recovery capacity for each group is calculated before applying the cap.

7.3 The following procedures must be used to calculate the planning volume for identifying shoreline cleanup capacity:

7.3.1 The following must be determined: The total volume of oil cargo carried; the appropriate cargo group for the type of oil carried [persistent (Groups 2, 3, 4) or non-persistent (Group 1)]; and the geographic area(s) in which the vessel operates. For a vessel carrying cargoes from different oil groups, each group must be calculated separately. Using this information, Table 3 must be used to determine the percentages of the total cargo volume to be used for shoreline cleanup resource planning.

7.3.2 The shoreline cleanup planning volume must be adjusted to reflect an emulsification factor using the same procedure as described in section 7.2.2.

7.3.3 The resulting volume will be used to identify response resources necessary for shoreline cleanup.

7.4 The following is an example of the procedure described above:

A vessel with a 100,000 barrel capacity for #6 oil (specific gravity .96) will move from a higher volume port area to another area. The vessel's route will be 70 miles from shore.

Cargo carried: 100,000 bbls. Group 4 oil.
Emulsification factor: 1.8.
Areas transited: Inland, Nearshore, Offshore, Open ocean.
Planned % on-water recovery:
Inland 50%
Nearshore 50%
Offshore 40%
Open ocean 20%.
Planned % oil onshore recovery:
Inland 70%
Nearshore 70%
Offshore 30%
Open ocean 30%.
Planning volumes for on water recovery:
Inland $100,000 \times .5 \times 1.8 = 90,000$ bbls
Nearshore $100,000 \times .5 \times 1.8 = 90,000$ bbls
Offshore $100,000 \times .4 \times 1.8 = 72,000$ bbls
Open ocean $100,000 \times .2 \times 1.8 = 36,000$ bbls
Planning volumes for on shore recovery:
Inland $100,000 \times .7 \times 1.8 = 126,000$ bbls
Nearshore $100,000 \times .7 \times 1.8 = 126,000$ bbls
Offshore $100,000 \times .3 \times 1.8 = 54,000$ bbls
Open ocean $100,000 \times .3 \times 1.8 = 54,000$ bbls

The vessel owner or operator must contract with a response resource capable of managing a 126,000 barrel shoreline cleanup in those areas where the vessel comes closer than 50 miles to shore. There is no contract required for the 54,000 barrel capability required for open oceans if the vessel is operating farther than 50 miles from shore during the transit.

Determine required resources for on water recovery for each tier using mobilization factors:

	Tier 1	Tier 2	Tier 3
Inland/Nearshore 90,000 ×	.15	.25	.40
Offshore 72,000 ×	.10	.165	.21
Open ocean 36,000 ×	.06	.10	12
	equals (barrels per day)		
Inland/Nearshore	13,500	22,500	36,000
Offshore	7,200	11,880	15,120
Open ocean	2,160	3,600	4,320

Since the requirements for tiers 1 and 2 for inland and nearshore exeed the caps, the vessel owner would only need to contract for 10,000 bpd for tier 1 and 20,000 bpd for tier 2. Sources for the remaining 3,500 bpd for tier 1 and 2,500 for tier 2 would need to be identified but not contracted for.

The vessel owner or operator would also be required to identify or contract for quantities of boom identified in Table 2 for the areas that the vessel operates.

8. Determining the Availability of High-Rate Response Methods

8.1 Response plans for a vessel carrying persistent oil as a primary cargo that operates in the offshore or open ocean environments must identify and ensure the availability of, through contact or other approved means, dispersants and appropriate application equipment in those areas. These resources must be capable of being on-scene within 24 hours of a discharge. The volume of oil discharge to be used in planning for dispersant use will be the volume of the single largest cargo tank aboard the vessel.

8.2 A response plan must identify the locations of dispersant stockpiles, methods of shipping to a shoreside staging area, and appropriate aircraft or vessels to apply the dispersant and monitor its effectiveness at the scene of an oil discharge.

8.2.1 Sufficient volumes of dispersants must be available to treat the oil at the dosage rate recommended by the dispersant manufacturer. Dispersants identified in a response plan must be on the NCP Product Schedule maintained by the U.S. Environmental Protection Agency. (Some states have a list of approved dispersants and within state waters only they can be used.)

8.2.2 Dispersant application equipment identified in a response plan must be located such that it can be mobilized to shoreside staging areas to meet the time requirements in 8.1 above. Sufficient equipment capacity must be identified to treat the planning volume (largest cargo tank) within 48 hours of arrival at the staging area.

8.3 In addition to the equipment and supplies required, a vessel owner or operator shall identify a source of support to conduct the monitoring and post-use effectiveness evaluation required by applicable regional and area contingency plans.

8.4 Identification of the resources for dispersant application does not imply that the use of this technique will be authorized. Actual authorization for use during a spill response will be governed by the provisions of the NCP and the applicable Regional or Area Contingency Plan. A vessel owner or operator that operates a vessel in areas with year-round pre-approval of dispersant can reduce their required on-water recovery capacity for 1993 up to 25%. A vessel owner or operator may reduce their required on water recovery cap increase for 1998 and 2003 up to 50% by identifying non-mechanical methods.

8.5 The use of in-situ burning as a non-mechanical response method is still being studied. Because limitations and uncertainties remain for the use of this method, it may not be used to reduce required oil recovery capacity in 1993.

9. Additional Equipment Necessary to Sustain Response Operations

9.1 A vessel owner or operator is responsible for ensuring that sufficient numbers of trained personnel and boats, aerial spotting aircraft, containment boom, sorbent materials, boom anchoring materials, and other supplies are available to sustain response operations to completion. A vessel owner or operator is not required to list these resources, but shall certify their availability.

9.2 A vessel owner or operator shall evaluate the availability of adequate temporary storage capacity to sustain the effective daily recovery rates from equipment identified in the plan. Because of the inefficiences of oil spill recovery devices, response plans must identify daily storage capacity equivalent to twice the effective daily recovery rate required on scene. This capacity may be reduced if a vessel owner or operator can demonstrate that the efficiencies of the oil recovery devices will reduce the overall volume of oily material storage requirement.

9.3 A vessel owner or operator shall ensure that their oil spill removal organization has the capability to arrange for disposal of recovered oil products. Specific disposal procedures will be addressed in the applicable Area Contingency Plan.

TABLE 1.—RESPONSE RESOURCE OPERATING CRITERIA—OIL RECOVERY DEVICES

Operating environment	Significant wave height	Sea state
River	<1 foot	1
Inland	<3 feet	2
Great Lakes	<4 feet	2–3
Ocean	<6 feet	3–4

BOOM

Boom property	Use			
	River	Inland	Great Lakes	Ocean
Significant Wave Height	<1	<3	<4	<6
Sea State	1	2	2–3	3–4
Boom height—in. (draft plus freeboard)	10–18	18–42	18–42	>42
Reserve Buoyancy to Weight Ratio	2:1	2:1	2:1	3:1 to 4:1
Total Tensile Strength—lbs.	4,500	15–20,000	15–20,000	<20,000
Skirt Fabric Tensile Strength—lbs.	200	300	300	500
Skirt Fabric Tear Strength—lbs.	100	100	100	125

TABLE 2.—SHORELINE PROTECTION REQUIREMENTS

Location	Boom contracted (ft.)	Availability hours		Boom identified (ft.)
		High volume port area	Other areas	
Persistent Oils				
Open Ocean				15,000
Offshore	15,000	24	48	Ref. Area Plan.
Nearshore/Inland	30,000	12	24	Ref. Area Plan.
Rivers	25,000	12	24	Ref. Area Plan.
Non-Persistent Oils				
Open Ocean				
Offshore				15,000

TABLE 2.—SHORELINE PROTECTION REQUIREMENTS—Continued

Location	Boom contracted (ft.)	Availability hours		Boom identified (ft.)
		High volume port area	Other areas	
Nearshore/Inland	10,000	12	24	Ref. Area Plan.
Rivers	15,000	12	24	Ref. Area Plan.

TABLE 3.—REMOVAL CAPACITY PLANNING TABLE

Spill location; Sustainability of on-water oil recovery—Oil group	Nearshore/inland, 4 days (percent)			River, 3 days (percent)			Open ocean, 10 days (percent)			Offshore, 6 days (percent)		
	Natural dissipation	Recovered floating oil	Oil on shore	Natural dissipation	Recovered floating oil	Oil on shore	Natural dissipation	Recovered floating oil	Oil on shore	Natural dissipation	Recovered floating oil	Oil on shore
1. Non-light persistent oils	80	20	80	10	10	10	100			95	5	
2. Light crudes and fuels	50	50	30	40	15	45	90	10		75	25	5
3. Medium crudes and fuels	30	50	50	20	15	65	75	20	5	60	40	20
4. Heavy crudes/fuels residual	10	50	70	5	20	75	50	20	30	50	40	30

TABLE 4.—EMULSIFICATION FACTORS FOR OIL CARGO GROUPS

Non-persistent oil:	
Group 1	1.0
Persistent oil:	
Group 2	2.5
Group 3	3.0
Group 4	1.8

TABLE 5.—ON WATER OIL RECOVERY RESOURCE MOBILIZATION FACTORS

Area	Tier 1	Tier 2	Tier 3
River	.30	.40	.60
Inland/Nearshore	15	.25	.40
Offshore	.10	165	.21
Ocean	.06	.10	12

Note: These mobilization factors are for total resources mobilized, not incremental resources.

TABLE 6.—RESPONSE CAPABILITY CAPS BY GEOGRAPHIC AREA

	Tier 1	Tier 2	Tier 3
March 1993:			
All except rivers	10K bbls/day	20K bbls/day	40K bbls/day.
Rivers	1,500 bbls/day	3,000 bbls/day	6,000 bbls/day.
March 1998:			
All except rivers	12.5K bbls/day	25K bbls/day	50K bbls/day.
Rivers	1,875 bbls/day	3,750 bbls/day	7,500 bbls/day.
March 2003:			
All except rivers	15K bbls/day	30K bbls/day	60K bbls/day.
Rivers	2,250 bbls/day	4,500 bbls/day	9,000 bbls/day.

Note: The caps show cumulative overall effective daily recovery rate, not incremental increases.

Dated: June 12, 1992.

J. W. Kime

Admiral, U. S. Coast Guard, Commandant.

[FR Doc. 92–14283 Filed 6–15–92; 3:30 pm]

BILLING CODE 4910–14–M